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決定香港中學生對學校、城市、國家和世界的歸屬感之因

素的調查

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# Public Policy Research Funding Scheme, Chief Executive's Policy Unit The Government of the Hong Kong Special Administrative Region of the People's Republic of China

# Determinants of Hong Kong Secondary Students' Senses of Belonging to School, City, Country, and the World

决定香港中學生對學校, 城市, 國家, 和世界的歸屬感之因素的調查

(Project Code: 2021.A5.100.21D)

# **Final Report**

Submitted by

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# **Executive Summary**

#### **Abstract of the Research**

Recent social changes in Hong Kong society and COVID-19 have sharply exacerbated adolescents' struggles to develop their personal, social, and societal identities. Such excessive struggles have yielded negative outcomes, including negative emotions (e.g., loneliness, fear, frustration, anger, and fury), confrontations, poor life satisfaction, mental illness, and a low sense of security. Facilitating a strong sense of belonging might help reduce these identity struggles. Furthermore, past studies have examined antecedents of belonging at one level (e.g., school belonging), but no published study has systematically modelled belonging across school, city, nation, and world levels (with potential conflicts and compatibilities), along with their antecedents (e.g., demographics, personal characteristics, values, emotions, motivation, environment, activities, social interactions). Hence, the current study theoretically proposes and empirically tests an ecological model of belonging, thereby yielding findings to inform policies, procedures, and activities of schools, government, and NGOs to help foster students' belonging across levels.

This mixed methods study had quantitative and qualitative phases. First, we surveyed a representative, stratified sampling of 1,350 students from 21 secondary schools in Hong Kong, for two times. Analyses of these survey responses identified links among belonging across levels and their antecedents, which informed our subsequent, in-depth interviews with 29 of these students. Content analysis of these interviews detailed the mechanisms through which antecedents affected student belonging across levels.

This study informed policy, procedures, activities, and interventions via (a) understanding the status quo senses of belonging of Hong Kong adolescent students, (b) identifying their antecedents, and (c) making recommendations. First, this study produced knowledge regarding Hong Kong students' current levels of belonging, their conflicts or compatibilities, and their navigation of multiple identities. Second, we identified significant antecedents of belonging across

levels and their mechanisms. Both inform our recommendations to schools, government agencies, and local community organizations.

### **Layman Summary on Policy Implications and Recommendations**

The study suggests that educators, researchers, and policymakers should take a holistic approach to promoting students' sense of belonging across four levels: school, city, country, and the world, by addressing multiple individual and contextual factors, including students' personal characteristics, values, emotions, motivation, environmental quality, activity participation, and social interactions. In our study, we have discovered that students' values towards the culture and history of their school, city, and country serve as the most influential individual factor, while the perceived environmental respect, diversity, and safety emerge as the most significant environmental factor. Building upon these findings, we have formulated specific and detailed policy recommendations.

Furthermore, by integrating both the quantitative and qualitative aspects of our study, we have also crafted policy recommendations using seven Chinese sayings. First, "一石三鳥" suggests that a single policy should target the promotion of multiple levels of belonging simultaneously, as these levels are mostly compatible, thus improvements in one aspect tend to positively impact the others. Second, "心想""事成" highlights the importance of students' *beliefs* and *perceptions* regarding the environmental quality, including the diversity, respect, supportiveness, and safety of the school, city, country, and the world. These *perceptions* serve as even stronger predictors of their sense of belonging than their *actual* participation in activities or their *actual* social interactions with others. To ensure policy effectiveness, it is essential to activate students' genuine feelings and beliefs as the foundations. The quality matters more than the quantity.

The third saying, "條條大路通羅馬," emphasizes that there are numerous strategies and methods available to promote a sense of belonging. As long as these strategies successfully activate students' beliefs and values, they can all achieve their intended goals. Fourth and fifth, the Chinese

sayings "千里之行,始於足下" and "不忘初心,方得始終" suggest that when striving to cultivate a sense of global belonging, it is essential to first focus on students' immediate surroundings. By nurturing their interactions and relationships with peers, teachers, parents, and individuals within their close community and neighbourhoods, we can establish a strong foundation. Furthermore, students should be educated to appreciate their unique Chinese culture, language, and characteristics before embracing a sense of global belonging. This approach may prove to be a more cost-effective and efficient strategy for promoting global belonging compared to expensive international trips and exchange programs.

Sixth, in situations where conflicts arise between predictors, the saying "兩其相害,取其輕" advises policy enactment to balance the relative benefits and harms of each side. When promoting one aspect of belonging comes at the expense of another, these policies require special attention and discussion. Additional policies may also be necessary to address any negative consequences. Finally, we summarize our policy recommendations by using "一花獨放不是春,百花齊放春滿園" to emphasize the importance of creating inclusive educational policies that support and uplift students in minor and disadvantaged situations. These policies should address various challenges, including gender disparities, birthplace diversity, ethnic diversity, and academic performance. By implementing inclusive policies, we can cultivate an educational environment that embraces diversity and provides equal opportunities for all students to thrive.

# 行政摘要

# 研究摘要

香港社會的社會變遷和 COVID-19 給青少年的個人和社會認同感的發展帶來了很大的困境。這種困境已經產生了負面結果,包括負面情緒(如孤獨、恐懼、挫敗、憤怒和憤慨)、衝突、生活滿意度低、心理疾病和低安全感。促進並提高青少年的歸屬感可能有助於改善這些困境。此外,過去的大部分研究都重點研究一個類型的歸屬感(如校園歸屬感),但少有研究系統地了解了跨學校、城市、國家和世界級別的多層次歸屬感(以及這些歸屬感之間潛在的衝突和兼容性),和它們的先決條件(如學生的個人特徵、價值觀、情緒、動機、環境因素、活動參與和學生的社會關係)。因此,本研究從理論上提出並實證測試了一個歸屬感的模型,以便為學校、政府和非政府組織的政策和活動的制定提供信息,以幫助促進學生在多個層面上的歸屬感。

這項混合方法研究有定量和定性兩個階段。首先,我們對香港 21 所中學的 1,350 名學生進行了兩次抽樣調查。對這些學生數據的分析幫助我們確定了多層次歸屬感及其先決條件之間的聯繫。這些發現為我們後續對這些學生當中的 29 人進行的深入訪談提供了信息。此外,對這些訪談內容的分析幫助我們更詳細的了解了影響學生多層次歸屬感的先決條件。

本研究旨為通過了解香港青少年學生目前的歸屬感狀況以及確定其先決條件,為政策、活動和干預提供信息。首先,本研究提供了有關香港學生當前多層次歸屬感的信息,以及他們之間的相互關係(衝突或兼容)。其次,我們確定了影響學生多層次歸屬感的重要先決條件及其影響機制。這兩點都為我們向學校、政府機構和地方社區組織提出建議提供了信息。

# 研究項目對政策影響和政策建議的摘要

這項研究建議教育工作者、研究人員和政策制定者在促進學生的歸屬感時,應採取一種整體的方法,涵蓋學校、城市、國家和世界這四個層面,並解決多個個體和環境因素,包括學生

的個人特徵、價值觀、情感、動機、環境品質、參與活動和社交互動。在我們的研究中,我 們發現學生對學校、城市和國家的文化和歷史價值觀是最具影響力的個體因素,而對環境尊 重、多樣性和安全的感知則是最重要的環境因素。基於這些發現,我們提出了具體而詳細的 政策建議。

此外,通過整合我們研究的量化和質化方面,我們還使用了六句中國諺語來制定政策建議。 首先, 「一石二鳥」建議單一政策應同時促進多個層面的歸屬感, 因為這些層面大多相容, 改善一個方面往往會對其他方面產生積極影響。其次,「心想」「事成」強調學生對學校、 城市、國家和世界的環境品質,包括多樣性、尊重、支持和安全的信念和感知,可能比他們 實際參與多少活動或實際與他人進行多少社交互動更能強烈預測他們的歸屬感。為確保政策 有效性、激活學生真實的感受和信念至關重要。也就是說、質量比數量更重要。 第三句諺語「條條大路通羅馬」強調促進歸屬感有許多策略和方法可供選擇,只要這些策略 成功激活學生的感知,它們都能實現預期的目標。第四句和第五句諺語「千裡之行,始於足 下丨和「不忘初心,方得始終」建議在努力培養全球歸屬感時,首先要專注於學生的周圍 環境。通過培養他們與同伴、教師、父母和社區鄰里的互動和關係,我們可以建立堅實的基 礎。此外,學生在培養全球歸屬感之前,應先學會欣賞他們獨特的中國文化、語言和特色。 相較於昂貴的國際旅行和交換計劃,這種方法可能更有效的促進學生的全球歸屬感。 第六,在預測因素之間存在衝突時,「兩其相害,取其輕」的諺語建議政策制定應平衡各方 的相對利益和損害。當促進一種歸屬感的行動損害其他類型的歸屬感時,這些政策需要特別 關注和討論,可能還需要其他政策來應對潛在的負面影響。最後,我們以「一花獨放不是」 春,百花齊放春滿園 | 來總結我們的政策建議,強調支持和提升處於次要和弱勢狀況的學生 的歸屬感的教育政策的重要性。這些政策應該應對各種挑戰,包括性別差異、出生地多樣

性、民族多樣性和學業表現。通過實施包容性政策,我們可以培養一個擁抱多樣性、為所有學生提供平等機會並使其茁壯成長的教育環境。

#### Introduction

Youths in Hong Kong struggle with pluralistic identities (e.g., personal, social, social, societal, international) and are unsure of whether they should belong to their school, their city, their country, the entire world, or any combination of them. The recent sociopolitical changes and the pandemic have exacerbated these struggles, resulting in poor academic performance, negative emotions, confrontations, poor life satisfaction, mental illness, self-doubt, social exclusion, and a sense of insecurity (Hartley & Jarvis, 2020; Hou et al., 2021; Liang et al., 2020). Facilitating students' sense of belonging helps reduce identity struggles and enhances their academic success, civic engagement, and emotional, mental, and physical health (Chen et al., 2020; Huang, 2020, 2022).

The sense of belonging is one's perceived connectedness to a social context (Allen et al., 2022; Baumeister & Leary, 1995). It is a fundamental human motivation that is critical to building identity. Like pluralistic identities, senses of belonging exist at multiple levels; a person may feel belonging to a group of people, a class, a subject of study, a school, a culture, a nation—or even the world (e.g., Baek, 2023; Kolesovs, 2021; Yelland et al., 2024). For adolescent students in Hong Kong, the most important types of belonging are, arguably, their belonging towards their school, city, nation, and the world.

While some determinants affect the sense of belonging across all levels, others affect it only at some levels, and still others have opposite effects at different levels (Hristova & Cekik, 2016). For example, fostering pride in local culture often increases community/city belonging but diminishes national belonging (Veg, 2017). Similarly, fostering cultural values can increase national belonging (Hansen & Hesli, 2009) but reduce global belonging (Doppen, 2010). Hence, understanding the complex interplays among these antecedents, the multifaceted senses of belonging, and the pluralistic identities of students can inform government officials in implementing beneficial and effective educational policies.

Despite the importance and complexities of belonging, identities, and their antecedents, scholars have not yet developed an integrative, systemic model of belonging. Therefore, the

proposed study aims to theoretically develop and empirically test a model that integrates literature on school belonging, community/national identity, and globalization to determine the antecedents of Hong Kong adolescent students' belonging to their schools, city, country, and the world.

#### **Policy and Context**

According to the Hong Kong Policy Address 2020, the government will "foster positive values among students as well as develop in them a sense of identity, belonging and responsibility towards the nation, the Chinese race and our society" (p. 74). In addition to belonging towards the local society and the nation, students in Hong Kong should develop a strong sense of belonging towards their school and the entire world. Hence, the Hong Kong government has implemented several policies to foster Hong Kong young people's sense of belonging.

# **Fostering Multiple Senses of Belonging**

Internships and ambassador programs seek to enhance students' belongings at multiple levels. The *Scheme on Corporate Summer Internship in the Mainland and Overseas* offers internships at Hong Kong companies' mainland China and overseas branches/operations to facilitate young people's sense of belonging towards their community, country, and the world.

The *Youth Ambassador Program* encourages service to the Hong Kong community, participation in government activities, and engagement in international events to facilitate young people's sense of city and global belonging.

#### **Fostering Single Sense of Belonging**

Various immersion, exchange, internship, and volunteer programs aim to enhance students' belonging at city, national, or world levels.

The *Member Self-Recommendation Scheme for Youth* encourages their active participation in specific government advisory committees and policy discussions (e.g., how to protect historical buildings in Hong Kong; how to reduce salt and sugar in food to promote local Hong Kong people's healthy lifestyle), which can facilitate young people's sense of belonging towards their city.

The Funding Scheme for Youth Internship in the Mainland, the Thematic Youth Internship

Program to the Mainland, the Funding Scheme for Youth Exchange in the Mainland, the Guangdong-Hong Kong-Macao Youth Cultural Exchange Program, and the Passing on the Torch support cultural immersion, internship, or exchange activities in the Mainland to facilitate youth's national belonging.

The *United Nationals Volunteers Program* and the *Funding Scheme for International Youth Exchange* encourage volunteer activities (e.g., contributing to global peace and development worldwide) and participation in international exchanges in other countries to foster global belonging.

Understanding the antecedents of belonging across levels and their relationships (e.g., possible conflicts, compatibilities) helps assess the viability of such programs and future programs and may inform effective cross-bureau collaborations among policymakers from a diverse range of backgrounds (e.g., school personnel, government agencies, NGOs).

## **Identity and Belonging**

Identity, a form of social representation that influences the relationship between individuals and the surrounding social world (Chryssochoou, 2003), includes both subjective and objective components (Bilgrami, 2006). The objective component of identity consists of an individual's biological or social facts (e.g., birth country, passport), whereas its subjective component consists of individuals' perceptions or beliefs about their identity, including a sense of belonging (Bilgrami, 2006). Fostering belonging across levels helps students better understand who they are, how they feel, and what they do—thereby giving them a sense of security that enhances engagement and well-being.

#### **Sense of Belonging Across Levels**

A greater sense of belonging aids individual development, fostering academic success, mental health, civic engagement, and whole-person development. However, belonging at different levels might yield different results. Specifically, previous studies have shown that students who reported a stronger sense of school belonging had better academic performance (Heaven et al.,

2002). Individuals who reported greater school, community, and national belonging showed better psychological functioning (e.g., better life satisfaction, less emotional distress, and less mental illness; Chen et al., 2020; Huang, 2020, 2022). Individuals with stronger national and global belonging reported greater confidence in the collective future (Skey, 2013). Moreover, students who reported greater school, community, national, and global belonging were found to be more socially engaged, contributed more to regional prosperity (e.g., school or community development), and embraced more civic, national, and international responsibilities (e.g., Galván et al., 2011). As childhood experiences (rather than adult experiences) largely drive the sense of belonging, school experiences might play an essential role in facilitating (or hindering) the development of belonging (Painter, 2013).

#### Conflicts and Compatibility between Pluralistic Belongings

Types of identity or belonging coexist and might influence one another (Catterall, 2011; Doppen, 2010). For instance, the coexistence of multiple ethnic groups helps (re)define a city, multiple cities with unique characteristics (re)define a nation, and close collaboration between nations helps (re)define globalization (Doppen, 2010). However, different types of belonging can conflict; students with a stronger sense of identity with an ethnic group (or a city, or other generally smaller units of social context) often identify less with their country (or a generally larger unit; *minority effects*, Hristova & Cekik, 2016; Veg, 2017). Likewise, individuals with stronger belonging towards their nation often feel less global belonging (Bearce et al., 2023; Hsu & Wang, 2010). Furthermore, the greater the differences between the units of social contexts (e.g., culture, history, language, religion), the sharper the contrast between the two types of identities (Hristova & Cekik, 2016). Therefore, although school belonging is rarely found to conflict with other levels of belonging, conflicts have been observed between ethnic/community and city belonging, city and national belonging, and national and global belonging (e.g., Bearce et al., 2023; Catterall, 2011; Veg, 2017).

# Antecedents of Belonging

Past studies on school belonging, regional/national identity, and global literacy indicate that both *individual* and *contextual* factors contribute to students' belonging.

#### **Individual Factors**

Individual factors include demographics, personal characteristics, values, emotions, and motivation.

# **Demographics**

Past studies have shown that socioeconomic status, ethnicity, gender, and grade level can affect the sense of belonging across levels.

All Belonging Levels. Students from families with higher socioeconomic status (SES) typically have more educational, societal, and international resources. These students are more likely to be respected by others at school and in society and tend to develop stronger personal values towards their social environment, hence, reporting greater school belonging (Means & Pyne, 2017), national belonging (e.g., China; Yuan & Li, 2019), and global belonging (Hsu & Wang, 2010).

Multiple Belonging. Ethnic minority students reported lower academic support at school, poorer socioeconomic resources, and more discrimination in society, which leads to a lower sense of school belonging (Duran et al., 2020; Faircloth & Hamm, 2005; Means & Pyne, 2017; Yelland et al., 2024) and national belonging (Hristova & Cekik, 2016). Moreover, a study conducted in the US found that their Caucasian and Asian students reported greater global belonging than those from other ethnic backgrounds, such as Hispanic or African American backgrounds (Hsu & Wang, 2010). Students reporting greater belonging to their ethnic groups than others reporting less national identity (Hristova & Cekik, 2016).

Both gender and grade level show mixed effects on the sense of belonging. Compared to US boys, US girls reported greater social skills (Abdi, 2010), greater global belonging (e.g., Aydin, et al., 2019; Hsu & Wang, 2010), and greater school belonging in Duran's (2020) study but not in

Anderman et al.'s (2003) study. Moreover, students from higher grade levels reported lower school belonging in Anderman et al.'s (2003) study but not in Duran's (2020) study. Global belonging has also shown mixed results; students from higher secondary grades reported greater global identity in the US but lower global identity in China (Hsu & Wang, 2010; Zhang et al., 2010).

#### Personal Characteristics

Personal characteristics include students' personality and previous academic achievement.

All Belonging. Students with superior learning outcomes have been found to have a greater school belonging (Anderman, 2003; Faircloth, 2005; Yelland et al., 2024), national belonging (e.g., in China; Yuan & Li, 2019), and global belonging (Zhang et al., 2010).

Multiple Belonging. Students who report greater conscientiousness, agreeableness, or positive affectivity (the tendency to experience positive emotions) have been found to show more positive attitudes towards schools (Heaven et al., 2002; Mammadov, 2022), which predicts greater levels of school belonging (Allen et al., 2018). In addition to school belonging, students with a greater tendency towards open-mindedness embrace diversity, new ideas, and new ways of living and often report greater global belonging (Aydin et al., 2019).

#### Values

Values that influence students' belonging primarily include values towards the culture, history, geography, and languages of the social context.

All Belonging. Students who value their school culture (e.g., academic intensity; school religion) or history (e.g., school establishment) more, have been found to perceive a better fit within their schools (Galván et al., 2011) and feel greater school belonging (Allen et al., 2018). Likewise, students who value their nation's culture (e.g., Chinese: Confucianism, filial piety) and history (e.g., Chinese revolution) have greater national belonging (e.g., China, Ghana, US; Doppen, 2010; McDonnell, 2011). Moreover, students who value world history, human history (e.g., human civilization), multiple cultures, cultural diversity, multiculturalism, immigration, human rights, or equality, report a greater concern for humanity and a stronger sense of global belonging (Massey,

2014).

Multiple Belonging. Students who value their regional/national languages often appreciate their regional/national attributes and hence feel higher regional/national belonging (Japan, Malaysia; Azmy et al., 2016; Chevasco, 2019). In contrast, students who value foreign or multiple languages across the world appreciate internationalization more than regional attributes and report greater global belonging (China, Korea, US; Hsu & Wang, 2010; Roger, 2010).

Conflicts between Antecedents. The effects of values may conflict across levels of belonging, with the greater value for one level of social context causing lower belonging for another level. For example, Hong Kong students who greatly value Cantonese report a greater sense of belonging towards Hong Kong but lower national belonging (Kuah-Pearce & Fong, 2010). At the national level, UK and Romanian students who value their native languages and cultures more report lower belonging to the European Union and to the world, respectively (Carey, 2010; Mihalcea et al., 2014).

#### **Emotions**

Past studies have shown that fear, pride, and empathy affect students' belonging across social contexts.

All Belonging. Fear of going to school is closely associated with loneliness and victimization at school, which predicts lower school belonging (Allen et al., 2018). Likewise, the fear of losing one's regional identity often drives overprotectiveness towards the regional identity and less national belonging (Mihalcea et al., 2014). Similarly, the fear of losing the national identity often drives over-recognition of national attributes, which in turn, reduces individuals' belonging towards broader social contexts, such as the European Union or the world (i.e., studies in Romania and the UK; Mihalcea et al., 2014; Carey, 2002).

**Multiple Belonging**. While fear decreases the sense of belonging, pride strengthens it. For example, students' greater pride in their school's (or city's or nation's) high academic ranking or sports achievement drives greater perceived attachment, which enhances belonging towards the

school (or city or nation; Doppen, 2010; Mihalcea, 2014).

**Single Belonging.** Students with greater empathy than others have been found to show greater interest in social issues such as inequality, environmental sustainability, and diversity (Cheng & Szeto, 2019). Students who are more empathetic than others are more willing to collaborate with others in solving global problems and hence report a stronger sense of global belonging (Cheng & Szeto, 2019).

#### Motivation

Self-esteem, academic self-concept, and political interest are linked to a sense of belonging.

**Multiple Belonging.** Greater self-esteem (i.e., perception of self-worthiness) yields more positive perceptions of the self and greater attachment to the social environment, which fosters greater school (Allen et al., 2018) and global belonging (Cheng & Szeto, 2019).

Single Belonging. Students with higher academic self-concept (i.e., perceived ability in performing academic tasks) often experience more positive experiences at school, yielding greater school belonging (Atabey, 2020; Korpershoek et al., 2020; Yelland et al., 2024). Moreover, individuals who report greater political interest are more likely to dip into local and international news and information, understand the world more comprehensively, and report a greater sense of global belonging (Carey, 2010).

#### **Contextual Factors**

Contextual factors include environment quality, interaction with others, and activity participation.

#### **Environment Quality**

A perceived diverse, respectful, and safe environment, as well as media exposure, affect belonging.

Multiple Belonging. A diverse and respectful environment increases both students' school belonging (Faircloth & Hamm, 2005; Yelland et al., 2024) and national belonging (Mihalcea et al., 2014). Moreover, perceptions of a safer school environment are also associated with students'

school belonging (Allen et al., 2018).

Concerning media exposure, a study in Macau found that students exposed to more prodemocracy media content than others reported lower national belonging, whereas those exposed to more pro-China content or those who used Chinese platforms for information access (e.g., Weibo) reported higher national belonging (towards China; Wang, 2017). Similarly, students who had more exposure to international content, including cultural diversity, immigration, or climate change, reported higher global belonging (McKenzie, 2006).

#### Activities

School, community, and international activities can influence identity building and belonging development.

All Belonging. Students who participate in more activities or greater diversity of activities at school than others often have stronger school belonging (Duran et al., 2020). Additionally, those who participate in more multicultural activities show greater national and international awareness, which yields greater national (China, Europe; Osler, 1998; Zhang, 2017) and global belonging (Bamford & Pollard, 2018).

Multiple Belonging. Community activities have been linked to the development of belonging. Students who participate in more volunteer activities report greater national and global belonging (Canada, USA; Massey, 2014). Moreover, students involved in addressing community or regional problems (e.g., taking care of the elderly) perceive greater responsibility to their community and greater national belonging (Lai et al., 2013). Students who work on urgent international challenges (e.g., climate change) report greater international responsibility and have greater global belonging (Massey, 2014).

Moreover, international activities have been linked to the formation of belonging. Studying abroad, whether short term or long term, increases students' global awareness, which facilitates global belonging (Lai, 2018). However, international activities have mixed effects on national belonging. For example, after Hong Kong students completed a short-term study abroad programs,

some of those students reported greater national awareness, stronger national pride, and greater national belonging. However, other students reported an increased preference for the host culture and style of living and a reduced sense of national belonging (Cheng & Szeto, 2019).

#### Social Interaction

All Belonging. Social interactions with people also influence students' belonging. Specifically, frequent and effective interactions with peers, parents, and teachers increase students' perceived acceptance and connection, which consistently enhances students' school belonging (Allen et al., 2018; Duran, 2020). Likewise, greater interactions with people from the local community or country foster a sense of relatedness between people who share similar community or national backgrounds, which further facilitates regional belonging or national belonging, respectively (Canada, Taiwan; Painter, 2013; Wang, 2019). Finally, frequent interaction with people from other countries, whether travelling abroad or hosting international friends, increases the sense of connection among students from diverse cultural backgrounds and confidence in international collaboration, resulting in greater levels of global belonging (Lai et al., 2018).

In summary, adolescents with a stronger sense of belonging across multiple levels might have fewer struggles with pluralistic identities, thereby showing better civic engagement, mental health, and life satisfaction while reducing self-doubt and insecurity. Belonging is a complex construct with different degrees across levels (school, city, nation, and world). However, prior studies on belonging have primarily focused on a single type of belonging/identity (e.g., school belonging) rather than considering different types together to understand their conflicts and compatibilities. Hence, the current study introduces a systematic theoretical framework that integrates individual and contextual determinants of students' senses of belonging across levels (along with their similar or opposing effects on belonging across levels) and empirically tests it to inform educational policy.

This model has important theoretical and practical implications. To contribute to theory, this model integrates multiple fields of research (i.e., belonging, identity, globalization) to create a

comprehensive framework for future studies focusing on belonging and identity building. To contribute to practice, this framework shows how young people in Hong Kong are currently living with pluralistic—and possibly conflicting—identities. Identity development at one level might facilitate or hinder its development at another level. This complexity and conflict help define and redefine students' identities and multiple facets of the self.

Therefore, education cannot be restricted to only one level of identity development; instead, it can teach students how to embrace complexity while balancing multiple identities and belonging. Unlike identity education, which indoctrinates or superficially controls/alters beliefs (e.g., memorizing textbooks about national pride; testing on national achievements, ["hard" or "cold"]; Leung, 2004), belonging education fosters a deeper feeling towards communities at each level (e.g., school trips, experiential learning, ["soft" or "warm"]; Allen et al., 2018), which can yield authentic, lasting social and societal improvements. Enhanced belonging with greater balance across levels is especially important for Hong Kong youths as they navigate pluralistic identities, the COVID-19 pandemic, and the ever-changing socio-political climate in the city, the nation, and across the world.

#### **Objectives of the Present Study**

The current study theoretically introduced and empirically tested a comprehensive model of belonging across levels and their antecedents. More specifically, we examine both the individual and contextual antecedents, including demographics, personal characteristics, values, emotions, motivation, perception of environmental quality, activity participation, and social interactions. Since identity is strongly related to one's sense of belonging, we also take into consideration of the corresponding identity in explaining our students' multiple levels of belonging. Integrating research in identity, belonging, and globalization, this study helped us better understand the relations between students' sense of belonging towards their school, city, country, and the world, as well as the determinants of belonging across multiple levels.

The study adopted a mixed-method approach by examining (1) the influences of a broad range of antecedents on student belonging, and (2) the detailed mechanisms of antecedents. In the

quantitative phase, students complete a survey across two time points within a school year regarding their school, city, national, and global belonging, along with possible antecedents. Then, qualitative interviews of selected students built on the statistically significant quantitative results to explore their specific mechanisms.

This study aimed to inform educational policy in several ways. First, the results examine the importance of Hong Kong youths living with pluralistic identities and multifaceted belonging at the school, city, country, and world levels. Second, the results help review, revise, and update government and educational policies, practices, legislations, and the secondary school curriculum, thereby facilitating students' sense of belonging across levels while maintaining a dynamic balance among them. Strong and balanced levels of belonging could not only increase our youths' psychological and physiological well-being but also reduce their identity struggles, and sociopolitical and public health challenges. Specifically, the study has the following four objectives:

- 1. Document Hong Kong adolescent students' status quo belonging to school, city, country, and the world
- 2. Determine the individual and contextual antecedents of students' belonging towards school, city, country, and the world
- 3. Determine the specific mechanisms, conflicts, and compatibility among antecedent students' belonging across levels
- 4. Recommend policies and practices to schools, government agencies, NGOs, and community organizations

#### Part One - Quantitative Phase

#### Methodology

# **Participants**

The present survey collected responses from 21 secondary schools in Hong Kong. The demographic backgrounds of the participants are presented in Table 1.

A total of 1,350 secondary school students from Forms 1 to 6 participated in the Time 1 survey, 1,195 participated in the Time 2 survey. Among the Time 1 participants, 45% (N = 608) were female. The students age ranged from 11 to 18 years old ( $M_{age} = 13.89$ ). Most of the students were born in Hong Kong (82.6%, N = 1,115), while 12.3% (N = 166) were born in Mainland China. In terms of ethnicity, 93.9% of the students identified themselves as Chinese (N = 1,267), and 1.9% non-Chinese (N = 25). Most of the students were permanent residents (88.3%, N = 1,192) of Hong Kong, while 1.9% were non-permanent residents (N = 26). Regarding parental background, 56.2% of their fathers (N = 759) and 33.9% of their mothers (N = 458) were born in Hong Kong, while 34.4% of their fathers (N = 464) and 56.1% of their mothers (N = 757) were born in Mainland China. The most spoken language at home was Cantonese (66.7%, N = 900), followed by Mandarin (15.4%, N = 208), English (0.6%, N = 8), and other languages (3%, N = 41). Similarly, at school, Cantonese was the most spoken language (72.6%, N = 980), followed by Mandarin (11.1%, N = 150), English (1%, N = 13), and other languages (0.1%, N = 2; for more details see Table 1).

**Table 1**Demographic characteristics of the six grades of secondary school students

				F1	requency (%	5)		
		Total	S1	S2	S3	S4	S5	S6
Gender	Female	608 (45.0)	181 (42.4)	117 (42.1)	104 (43.3)	109 (41.8)	68 (41.2)	26 (44.1)
er	Male	675 (50.0)	145 (52.9)	151 (54.3)	131 (54.6)	133 (51.0)	85 (51.5)	29 (49.2)
	Other	17 (1.3)	1 (0.3)	1 (0.4)	3 (1.3)	7 (2.7)	1 (0.6)	3 (5.1)
	Missing	50 (3.7)	15 (4.4)	9 (3.2)	2 (0.8)	12 (4.6)	11 (6.7)	1 (1.7)
Birth	Hong Kong	1115 (82.6)	294 (86.0)	226 (81.3)	193 (80.4)	218 (83.5)	138 (83.6)	42 (71.2)
Birthplace	Mainland China	166 (12.3)	32 (9.4)	38 (13.7)	39 (16.3)	26 (10.0)	16 (9.7)	15 (26.3)
	Others	10 (0.7)	2 (0.6)	1 (0.4)	3 (1.3)	3 (1.1)	1 (0.6)	0(0.0)
	Missing	59 (4.4)	14 (4.1)	13 (4.7)	5 (2.1)	14 (5.4)	10 (6.1)	2 (3.4)
Ethnicity	Chinese	1267 (93.9)	318 (93.0)	264 (95.0)	231 (96.3)	240 (92.0)	154 (93.3)	56 (94.9)
city	Non- Chinese	25 (1.9)	8 (2.3)	3 (1.1)	5 (2.1)	7 (2.7)	1 (0.6)	1 (1.7)
	Missing	58 (4.3)	16 (4.7)	11 (4.0)	4 (1.7)	14 (5.4)	10 (6.1)	2 (3.4)

Citize	Permanent Resident	1192 (88.3)	312 (91.2)	238 (85.6)	211 (87.9)	230 (88.1)	146 (88.5)	51 (86.4)
Citizenship	Non- permanent Resident	26 (1.9)	7 (2.0)	4 (1.4)	6 (2.5)	4 (1.5)	3 (1.8)	2 (3.4)
	Missing	132 (9.8)	23 (6.7)	36 (12.9)	23 (9.6)	27 (10.3)	16 (9.7)	6 (10.2)
Fathe	Hong Kong	759 (56.2)	203 (59.4)	149 (53.6)	138 (57.5)	142 (54.4)	96 (58.2)	28 (47.5)
Father birthplace	Mainland China	464 (34.4)	98 (28.7)	108 (38.8)	90 (37.5)	90 (34.5)	51 (30.9)	26 (44.1)
place	Others	38 (2.8)	15 (4.4)	7 (2.5)	3 (1.3)	9 (3.4)	3 (1.8)	1 (1.7)
€0	Missing	89 (6.6)	26 (7.6)	14 (5)	9 (3.8)	20 (7.7)	15 (9.1)	4 (6.8)
Moth	Hong Kong	458 (33.9)	132 (38.6)	92 (33.1)	75 (31.3)	86 (33)	53 (32.1)	17 (28.8)
Mother birthplace	Mainland China	757 (56.1)	166 (48.5)	158 (56.8)	157 (65.4)	145 (55.6)	93 (56.4)	37 (62.7)
plac	Others	49 (3.6)	17 (5.0)	11 (4.0)	3 (1.3)	12 (4.6)	5 (3.0)	1 (1.7)
O	Missing	86 (6.4)	27 (7.9)	17 (6.1)	5 (2.1)	18 (6.9)	14 (8.5)	4 (6.8)
Most-spoken language at home	Cantonese	900 (66.7)	243 (71.1)	184 (66.2)	165 (68.8)	175 (67.0)	114 (69.1)	19 (32.2)
spol age a	Mandarin	208 (15.4)	56 (16.4)	51 (18.3)	44 (18.3)	35 (13.4)	21 (12.7)	1 (1.7)
ken at he	English	8 (0.6)	4 (1.2)	2 (0.7)	0 (0.0)	1 (0.4)	1 (0.6)	0 (0.0)
me	Others	41 (3.0)	8 (2.3)	11 (4.0)	8 (3.3)	7 (2.7)	7 (4.2)	0 (0.0)
	Missing	193 (14.3)	31 (9.1)	30 (10.8)	23 (9.6)	43 (16.5)	22 (13.3)	39 (66.1)
Most-spoken language at school	Cantonese	980 (72.6)	257 (75.1)	210 (75.5)	177 (73.8)	198 (75.9)	120 (72.7)	18 (30.5)
	Mandarin	150 (11.1)	41 (12.0)	35 (12.6)	35 (14.6)	18 (6.9)	19 (11.5)	2 (3.4)
	English	13 (1.0)	7 (2.0)	0 (0.0)	3 (1.3)	2 (0.8)	1 (0.6)	0 (0.0)
hool	Others	2 (0.1)	1 (0.3)	1 (0.4)	0 (0.0)	0(0.0)	0(0.0)	0 (0.0)
	Missing	205 (15.2)	36 (10.5)	32 (11.5)	25 (10.4)	43 (16.5)	25 (15.2)	39 (66.1)

# Measures

Fifteen scales were used in the present study to assess students' sense of belonging and the facilitating factors that influence students' multiple levels of belonging (i.e., personal characteristics, value, emotions, motivation, perceived environmental quality, participation in activities, and social interactions; for more details see Table 2).

**Students' Senses of Belonging and Identity Across Levels.** Two 5-point scales were used to assess students' senses of belonging and identity in the school, the city, the country, and the

world. McNeely's (2002) scale was modified and administered to assess students' sense of belonging across levels. The scale included 12 items with three items in each level, measuring students' *school* ( $\alpha_{Time1} = .809$ ,  $\alpha_{Time2} = .832$ ; e.g., "I feel close to people at this school), *city* ( $\alpha_{Time1} = .827$ ,  $\alpha_{Time2} = .864$ ; "I feel close to people in Hong Kong"), *country* ( $\alpha_{Time1} = .940$ ,  $\alpha_{Time2} = .946$ ; "I feel close to people in China"), and global ( $\alpha_{Time1} = .801$ ,  $\alpha_{Time2} = .815$ ; "I feel close to people in the world";  $1 = Strongly \ disagree$ ,  $5 = Strongly \ agree$ ) belonging. Parallel wordings of items were used across levels to ensure that the items were consistent in phrasing and allow valid comparisons across levels. As for assessing students' identity, the modified version of Huddy and Khatib's (2007) scale was used. Each level includes a single-item scale with parallel wordings (e.g., "The term Hongkonger describes me well;"  $1 = Strongly \ disagree$ ,  $5 = Strongly \ agree$ ).

**Personal Characteristics.** The International Positive and Negative Affect Schedule Short Form (I-PANAS-SF) developed by Watson et al. (1988) was administered to measure students' positive and negative affectivity. The scale consists of two five-item, 5-point Likert scales measuring positive affectivity ( $\alpha_{Time1} = .746$ ,  $\alpha_{Time2} = .701$ ; e.g., "During the past few weeks, have you felt inspired") and negative affectivity ( $\alpha_{Time1} = .827$ ,  $\alpha_{Time2} = .830$ ; e.g., "During the past few weeks, have you felt hostile;" 1 = Not at all, 2 = Slightly, 3 = Moderately, 4 = Quite a bit, 5 = Extremely).

In addition, the Ten Item Personality Measure (TIPI), originally developed by Gosling (2003) was used in the study. The 5-point Likert scale assessed students' personality, including extraversion ( $r_{Time1} = .196$ ,  $r_{Time2} = .246$ , e.g., "I see myself as extraverted"), agreeableness ( $r_{Time1} = .033$ ,  $r_{Time2} = .100$ , e.g., "I see myself as friendly"), conscientiousness ( $r_{Time1} = .228$ ,  $r_{Time2} = .200$ , e.g., "I see myself as self-disciplined"), neuroticism ( $r_{Time1} = .100$ ,  $r_{Time2} = .086$ , e.g., "I see myself as calm"), and openness to change ( $r_{Time1} = .053$ ,  $r_{Time2} = .040$ , e.g., "I see myself as open to new experiences") with two items for each construct (1 = Strongly disagree, 5 = Strongly agree).

**Values.** A 17-item, 5-point self-developed scale was used in this study to measure students' values about the culture, history, and languages in the school, the city, the country, and the world.

At the school level, we used five items to assess students' value towards their school's *culture* (e.g., "Studying my school's culture is important"), *history* (e.g., "Studying my school's history is important"), and *using Cantonese* (e.g., "Using Cantonese in school is important"), *Mandarin* (e.g., "Using Mandarin in school is important"), and *English* (e.g., "Using English in school is important") at school.

At the city level, a five-item subscale with parallel wordings is adopted to evaluate students' valuations of the *city's culture* (e.g., "Studying Hong Kong culture is important"), *history* (e.g., "Studying Hong Kong's history is important"), and *using Cantonese* (e.g., "Using Cantonese in Hong Kong is important"), *Mandarin* (e.g., "Using Mandarin in Hong Kong is important"), and *English* (e.g., "Using English in Hong Kong is important") in the city.

At the country level, we measured students' value towards the *country's culture* (e.g., "Studying Chinese culture is important"), and *history* (e.g., "Studying Chinese history is important") with two items.

At the world level, a five-item subscale was employed to gauge the value students placed on the world culture (e.g., "Studying global civilization is important"), history (e.g., "Studying the world's history is important"), and use of Chinese (e.g., "Using Chinese in the current world is important"), English (e.g., "Using English in the current world is important"), and multiple languages (e.g., "Using multiple languages in the current world is important;" 1 = Strongly disagree, 5 = Strongly agree).

**Emotions.** The 12-item Adolescent Measure of Empathy and Sympathy developed by Vossen et al. (2015) was administered in this study to measure students' *cognitive empathy* ( $\alpha_{Time1} = .826$ ,  $\alpha_{Time2} = .849$ ; e.g., "I understand how people feel before they tell me"), *affective empathy* ( $\alpha_{Time1} = .829$ ,  $\alpha_{Time2} = .855$ ; e.g., "When my friend is scared, I feel scared too"), and *sympathy* ( $\alpha_{Time1} = .811$ ,  $\alpha_{Time2} = .824$ ; e.g., "When people around me are nervous, I become nervous too") on a 5-point Likert scale (1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always).

Moreover, adapted items from Pekrun's Achievement Emotion Questionnaire (2000) were also used to assess students' emotions in the classroom. The scale included nine items on a 5-point Likert scale measuring students' experiences of *enjoyment* ( $\alpha_{Time1} = .844$ ,  $\alpha_{Time2} = .870$ ; e.g., "I enjoy being in his/her class"), *anger* ( $\alpha_{Time1} = .842$ ,  $\alpha_{Time2} = .843$ ; e.g., "I am angry"). and *anxiety* ( $\alpha_{Time1} = .707$ ,  $\alpha_{Time2} = .714$ ; e.g., "I feel nervous in his/her class"; 1 = Strongly disagree, 5 = Strongly agree) in the classroom.

**Motivation.** Three three-item, 5-point Likert scales were used to assess students' *academic effort*, *procrastination*, and *political interest*. McInerney and Ali's (2006) scale was administered to measure students' *academic effort* ( $\alpha_{Time1} = .786$ ,  $\alpha_{Time2} = .804$ ; e.g., "I try hard to make sure that I am good at my schoolwork.") Yockey's (2016) scale was adopted to assess students' *academic procrastination* ( $\alpha_{Time1} = .774$ ,  $\alpha_{Time2} = .738$ ; e.g., "I put off projects until the last minute,") and a self-developed scale was used to assess students' political interest ( $\alpha_{Time1} = .786$ ,  $\alpha_{Time2} = .813$ ; e.g., "I am interested in current affairs;" 1 = Strongly disagree, 5 = Strongly agree).

Environmental Quality. The present study administered a 12-item, 5-point Likert scale to assess students' perceived environment about its *safety* (McNeely et al., 2002; e.g., "My school is a safe place"), *respect* (McNeely et al., 2002; e.g., "I feel respected in my school"), and *diversity* (Wilson, 2004; e.g., "My school is full of diversity"; 1 = *Strongly disagree*, 5 = *Strongly agree*) in the city, the country, and the world. Parallel wordings were used across four levels (three aspects at four levels).

In addition, a 5-point scale with 25 items was also adopted to ask the students how frequently they access each media source for news updates (e.g., "Commercial Radio News", "Weibo", "Twitter"; 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always). The results of the exploratory factor analysis will be discussed in the next section.

**Activities.** A 5-point self-developed scale with 13 items was used to assess students' participation in activities in the *school*, the *local community*, the *city*, the *country*, and the *world*. At the school level, a three-item subscale was adopted to assess students' participation in *school* ( $\alpha_{\text{Timel}}$ )

= .703,  $\alpha_{\text{Time2}}$  = .735; e.g., "How often do you participate in extracurricular activities at school;" 1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always). At the *community* level, two items were used to measure the extent of students' engagement in community activities ( $r_{\text{Time1}}$  = .450,  $r_{\text{Time2}}$  = .503; e.g., "How often do you participate in community activities"). At the *city* level, we used a three-item subscale to evaluate students' participation in the city ( $\alpha_{\text{Time1}}$  = .673,  $\alpha_{\text{Time2}}$  = .658; e.g., "How often do you participate in volunteer activities in Hong Kong?" 1 = *Never*, 2 = *Less than once a year*, 3 = *One to two times a year*, 4 = *Three to five times a year*, 5 = *More than five times a year*).

At the *country* level, a two-item subscale was implemented to gauge students' degree of participation in country activities ( $r_{Time1} = .346$ ,  $r_{Time2} = .302$ ; e.g., "How often do you go to Mainland China?" 1 = Never, 2 = Less than once a year, 3 = One to two times a year, 4 = Three to five times a year, 5 = More than five times a year). At the world level, the level of participation in global activities was measured with three items ( $\alpha_{Time1} = .562$ ,  $\alpha_{Time2} = .583$ ). They are "How often do you travel to other countries?" "How often do you participate in international academic activities?" measured in a 5-point Likert scale (1 = Never, 2 = Less than once a year, 3 = One to two times a year, 4 = Three to five times a year, 5 = More than five times a year), and "How often do you communicate with friends/relatives in other countries?" measured in another 5-point Likert scale (1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Always).

Another six-item, 5-point Likert scale was administered in the Time 2 survey to assess students' willingness to participate in social curriculum and co-curriculum activities in the *city* (r = .572; e.g., "Participating in school tours in Hong Kong"), the *country* (r = .725; e.g., "Participating in school tours in Mainland China"), and the *world* level (r = .729; e.g., "Participating in international exchange activities";  $1 = Strongly\ disagree$ ,  $5 = Strongly\ agree$ ).

**Social Interactions.** A 13-item, 5-point measure was adopted to measure students' social interactions. More specifically, four items modified from Wentzel et al.'s scale were used to assess students' interaction with peers ( $r_{Time1} = .697$ ,  $r_{Time2} = .723$ ; e.g., "My classmates care about my

feelings") and *teachers* ( $r_{\text{Timel}} = .749$ ,  $r_{\text{Time2}} = .747$ ; e.g., "My teachers like me.") Two items were adopted from Sartor and Youniss' scale (2002) measuring students' interaction with *parents* ( $r_{\text{Timel}} = .576$ ,  $r_{\text{Time2}} = .598$ ; e.g., "My parents try to compromise when we disagree.") Seven self-developed items were used to assess students' interactions with people in the *city* ( $\alpha_{\text{Time1}} = .888$ ,  $\alpha_{\text{Time2}} = .883$ ; e.g., "People in Hong Kong will help me when I am in trouble"), the *country* ( $\alpha_{\text{Time1}} = .641$ ,  $\alpha_{\text{Time2}} = .615$ ; e.g., "I have close family members living in Mainland China,") and the *world* ( $\alpha_{\text{Time1}} = .514$ ,  $\alpha_{\text{Time2}} = .499$ ; e.g., "I have good friends living in other countries"; 1 = Not at all, 2 = Slightly, 3 = Moderately, 4 = Quite a bit, 5 = Extremely).

 Table 2

 Reliability summary of total scales and subscales

Scale	Number of		α		r
	items	1st Term	2 <sup>nd</sup> Term	1st Term	2 <sup>nd</sup> Term
Senses of belonging					
School	3	.809	.832		
City	3	.827	.864		
Country	3	.940	.946		
World	3	.801	.815		
Personal characteristics					
Affect					
Positive affect	5	.746	.701		
Negative affect	5	.827	.830		
Big five					
Extraversion	2			.196	.246
Agreeableness	2			.033	.100
Conscientiousness	2			.228	.200
Neuroticism	2			.100	.086
Openness	2			.053	.040
Emotions					
Empathy and sympathy					
Cognitive empathy	4	.826	.849		
Affective empathy	4	.829	.855		
Sympathy	4	.811	.824		
Achievement emotions questionnaire					

Enjoyment	3	.844	.870		
Anger	3	.842	.843		
Anxiety	3	.707	.714		
Motivation	_				
Academic effort	3	.786	.804		
Academic procrastination	3	.774	.738		
Political interest	3	.786	.813		
Environmental quality	_				
Media					
Hong Kong and international news platforms	15	.917	.925		
Chinese news platforms and social media	3 (Time 1) 6 (Time 2)	.763	.850		
International social media	4	.668	.662		
Activities	<del>-</del>				
Participation of activities					
School	3	.703	.735		
Community	2			.450	.503
City	3	.673	.658		
Country	2			.346	.302
World	3	.562	.583		
Social curriculum and co- curriculum activities					
City	2				.572
Country	2				.725
World	2				.729
Social interactions	_				
Peers	2			.697	.723
Teachers	2			.749	.747
Parents	2			.576	.598
People in Hong Kong	3	.888	.883		
People in China	2			.641	.615
People in the world	2			.514	.499

# **Procedures**

The research team contacted 447 secondary schools in Hong Kong by mail, email, and fax to invite them to participate in this study. Parental consent forms were sent to the schools and distributed to the students, and only those with parental consent were recruited for the study. Our

final sample includes 1,350 students from 21 secondary schools in Hong Kong, including 342 Form 1 students from six schools, 278 Form 2 students from seven schools, 240 Form 3 students from six schools, 261 Form 4 students from 12 schools, 165 Form 5 students form nine schools and 59 Form 6 students from four schools (please refer to table 2 for more details). The survey was conducted either in paper form or online, according to the preference and feasibility of each school. If the paper version was used, our team visited the schools to distribute the surveys and monitored the entire data collection progress to ensure high-quality data collection and that all students' responses were kept strictly confidential. In cases that the online version was used, participants received a link to the online questionnaire on the online survey platform – Qualtrics, and only our research team had access to the response.

Table 3

Number of Students Recruited

Grades	Number of students who completed the	Number of schools involved
	survey	
Secondary 1	342	6
Secondary 2	278	7
Secondary 3	240	6
Secondary 4	261	12
Secondary 5	165	9
Secondary 6	59	4
Missing	5	
Total	1,350	21
Band 1	520	12
Band 2	96	4
Band 3	733	4
Missing	1	1
Total	1,350	21

### Data Analysis

Our data analyses consisted of four steps. **First**, we calculated the means and standard deviations of data from two-time points. We also performed exploratory factor analysis to determine the categorization for media platforms. **Second**, we conducted *t*-tests to explore whether there were any differences concerning students' gender (male vs. female), ethnicity (Chinese vs. non-Chinese), and birthplace (Hong Kong vs. Mainland China). **Third**, we conducted correlation analyses to investigate the relationships between various factors and students' sense of belonging across levels. **Fourth**, we conducted hierarchical regression analyses to examine the predictors of students' senses of belonging across levels at Time 2 after controlling for the baseline levels of belonging and identity at Time 1. With our longitudinal data, we were able to control for the baseline levels, hence, the results inform prediction and should be considered robust.

Specifically for the regression analyses in step four, we conducted 28 sets of regression analyses investigating the influences of seven identified antecedents at Time 1 (i.e., personal characteristics, value, emotions, motivation, environment quality, activities, and social interactions) on four levels of belonging (i.e., school, city, nation, and the world) at Time 2, controlling for the baseline levels of the outcomes at Time 1. Students' corresponding sense of belonging and identity in the first term, gender, age, ethnicity, and birthplace, were included as covariates.

Finally, given the nested nature of our data, with two distinct time points collected for each individual student and each student being nested within a specific school, a multilevel analysis (Goldstein, 2011) was employed in our subsequent analysis. We initially examined the proportions of variances present at the time, student, and school levels, assessing their significance.

Subsequently, a multilevel analysis was conducted, focusing on the levels that demonstrated significant variances in student belonging across these levels. As a final step, we investigated all the variables within a single model for each type of belonging, comparing and ranking them from strongest to weakest predictors. Altogether, four multilevel models were examined.

An explanatory model is as follows:

**Belonging**<sub>yij</sub> = 
$$\beta_y + e_{yij} + f_{yj}$$
 (1)

In the vector **Belonging**<sub>yij</sub>, outcome y (school belonging, city belonging, country belonging, global belonging) of the time point i in student j has a grand mean intercept  $\beta_y$ , with unexplained components (*residuals*) at the time- and student-levels ( $e_{yij}$ ,  $f_{yj}$ ). Explanatory variables are entered in sequential sets to estimate the variance explained by each set (Kennedy, 2008). As **Demographics** are generally fixed and unaffected by the other measures in the short-term, these variables are entered first.

$$\begin{aligned} \textbf{Belonging}_{yij} &= \beta_y + e_{yij} + f_{yj} + \beta_{yqj} \textbf{Demographics}_{yij} + \beta_{yrj} \textbf{Personal}_{yij} + \beta_{ysj} \textbf{Values}_{yij} \\ &+ \beta_{yvj} \textbf{Environment}_{yij} + \beta_{ywj} \textbf{Activities}_{yij} + \beta_{yxj} \textbf{Social}_{yij} \\ &+ \beta_{yuj} \textbf{Motivations}_{yij} + \beta_{ytj} \textbf{Emotions}_{yij} + \beta_{yzj} \textbf{Interactions}_{yij} \end{aligned} \tag{2}$$

A nested hypothesis test ( $\chi^2$  log likelihood) indicates whether each set of explanatory variables is significant (Kennedy, 2008). As omitting non-significant isolated variables does not cause omitted variable bias, we safely remove them to increase precision and reduce multicollinearity (Kennedy, 2008). We apply this procedure to all vectors. Specifically, **Personal** attributes can change but are generally stable in the short-term, so they are entered next. As family often affects a student's **Values** before schooling, they follow into the regression. Then, the school **Environment** affects events inside the school, so they are entered. Next, **Activities** can affect students' social interactions, motivation, and emotions; hence, activity variables are entered next. **Social** interactions can affect a student's motivation and emotions, so its variables follow into the regression. **Motivation** affects **Emotions**, so the former are entered before the later.

#### Results

## Exploratory Factor Analysis of the Media Scale

The exploratory factor analysis of the media scale was conducted using the principal component extraction method extracting three factors, with the varimax with Kaiser Normalization as the rotation method. Table 4 presented the factor loadings of the three extracted factors.

**Table 4**Result from a Factor Analysis of the Media Scale

Media item	Fa	actor loadir	ng
	1	2	3
Factor 1: Hong Kong and international news platforms			
Now TV News / Viu TV News	.539		
Commercial Radio News	.712		
TVB News	.386		
RTHK News	.724		
Yahoo! News	.748		
BBC News	.661		
South China Morning Post	.672		
i-CABLE News	.714		
am730	.723		
Headline Daily	.747		
Cable News Network (CNN)	.790		
Oriental Daily News / on.cc	.754		
Ming Pao	.751		
HK01	.638		
Sing Tao Daily	.746		
Factor 2: Chinese news platforms and social media			
Weibo		.729	
China Central Television (CCTV)		.588	
WeChat		.858	
Douyin (TikTok)		.798	
Bilibili		.736	
Xiaohongshu		.705	
Factor 3: international social media			
Facebook			.452
Twitter			.570
Instagram			.798
YouTube			.755

Note. Extraction method: Principal component. Rotation method: Varimax with Kaiser

Normalization.

Factor 1 – Hong Kong and International News Platforms. Factor 1 consisted of 15 items (i.e., Now TV / Viu TV News, Commercial Radio News, TVB News, RTHK News, Yahoo! News,

BBC News, South China Morning Post, i-CABLE News, am730, Headline Daily, Cable News Network, Oriental Daily News / on.cc, Ming Pao, HK01, and Sing Tao Daily), which appear to be news platforms in Hong Kong and other countries. Therefore, it was named *Hong Kong and International News Platforms*.

Factor 2 – Chinese News Platforms and Social Media. Factor 2 contained six items (i.e., Weibo, CCTV, WeChat, Douyin (TikTok), Bilibili, and Xiaohongshu). They are all social media and news platforms in China and were categorized as *Chinese news platforms and social media*.

Factor 3 – International Social Media. Factor 3 included four items (i.e., Facebook, Twitter, Instagram, and YouTube), with all of them appeared to be global social media platforms. This factor was classified as *international social media*.

#### Analyses of Means and Standard Deviations

The means and standard deviations of students' senses of belonging, senses of identity, personal characteristics, values, emotions, motivations, environment quality, activities, and social interactions at two-time points were calculated, and the result was presented below.

Senses of Belonging. The results of paired samples t-tests that compared the participants' reports on the sense of belonging across all four levels (i.e., school belonging, city belonging, country belonging, and world belonging) in the first and second school terms were summarized in Table 5. It was found that the students' reports on their overall school belonging (t = 12.28; p < .001), the overall city belonging (t = 8.03; p < .001), the overall country belonging (t = 6.82; t = 0.001), and the overall world belonging (t = 5.11; t = 0.001) in the first term were higher than the scores in the second term. The highest mean that students report in the first term was their overall city belonging (t = 0.001), followed by school belonging (t = 0.001), country belonging (t = 0.001), and world belonging (t = 0.001).

**Table 5**Students' Senses of Belonging across Two Terms

Scale 1<sup>st</sup> term 2<sup>nd</sup> term

	Actual range	M	SD	M	SD
School belonging	1-5	3.74	0.77	3.47	0.81
I feel close to people at this school.	1-5	3.68	0.91	3.86	0.88
I feel like I am part of this school.	1-5	3.66	0.95	3.44	0.92
I am happy to be at this school.	1-5	3.57	0.93	3.37	0.97
City belonging	1-5	3.91	0.76	3.73	0.79
I feel close to people in Hong Kong.	1-5	3.81	0.87	4.04	0.85
I feel like I am part of Hong Kong.	1-5	3.88	0.92	3.62	0.89
I am happy to be in Hong Kong.	1-5	3.81	0.87	3.74	0.92
Country belonging	1-5	3.67	1.04	3.52	1.02
I feel close to people in China.	1-5	3.61	1.10	3.70	1.10
I feel like I am part of China.	1-5	3.69	1.11	3.49	1.05
I am happy to be in China.	1-5	3.54	1.07	3.53	1.11
World belonging	1-5	3.66	0.80	3.55	0.82
I feel close to people in the world.	1-5	3.36	0.93	3.85	0.92
I feel like I am part of the world.	1-5	3.76	0.99	3.31	0.92
I am happy to be in the world.	1-5	3.72	0.94	3.62	1.02

According to Table 6, the results of the school belonging sub-scale showed that a substantial percentage of students agreed or strongly agreed with the sub-item "I feel close to people at this school" in the first term (59.6%), though the percentage slightly decreased in the second term (44.5%). However, 7.7% of students disagreed or strongly disagreed with this sub-item in the first term, and this number slightly increased in the second term (10.7%). Similarly, a substantial percentage of students agreed or strongly agreed with the sub-item "I feel like I am part of this school" in the first term (67.9%), though the percentage slightly decreased in the second term (51.5%). And 7.4% of students disagreed or strongly disagreed with this sub-item in the second term, which slightly increased compared to the first term (4.4%). Finally, a substantial percentage of students agreed or strongly agreed with the sub-item "I am happy to be at this school" in the first term (56.4%), though the percentage slightly decreased in the second term (42.6%). Additionally,

7.3% of students disagreed or strongly disagreed with this sub-item in the first term and slightly increased in the second term (11.8%).

The results of the city belonging sub-scale indicated how students felt about their connection to Hong Kong. In the first term, a large proportion of students reported feeling close to people in Hong Kong (62.2%) and feeling like they were part of Hong Kong (74.8%). Similarly, many students reported feeling happy to be in Hong Kong (66.6%). However, in the second term, these percentages decreased slightly. On the other hand, a small percentage of students disagreed or strongly disagreed with these sub-items. For example, 3.9% of students disagreed or strongly disagreed with feeling close to people in Hong Kong in the first term, and this number slightly increased in the second term (5.9%). Similarly, 2.9% of students disagreed or strongly disagreed with feeling like they were part of Hong Kong in the second term, which slightly increased compared to the first term (2.4%). Finally, 5.4% of students disagreed or strongly disagreed with feeling happy to be in Hong Kong in the first term, and this number slightly decreased in the second term (5.0%).

Results of the country belonging sub-scale showed that more than half of the students agreed or strongly agreed with the sub-item "I feel close to people in China" in the first term (52.2%), though the percentage slightly decreased in the second term (47.3%). Additionally, 12.5% of students strongly disagreed or disagreed with this sub-item in the first school term while the same percentage of students disagreed in the second term. Furthermore, many students agreed or strongly agreed with the sub-item "I feel like I am part of China" in the first term (56%), though the percentage slightly decreased in the second term (48.3%). Additionally, 11.9% of students disagreed or strongly disagreed with this sub-item in the second term, which slightly increased compared to the first term (10.2%). Finally, a substantial percentage of students agreed or strongly agreed with the sub-item "I am happy to be in China" in the first term (55.6%), though the percentage slightly decreased in the second term (47.8%). Additionally, 10.3% of students disagreed or strongly

disagreed with this sub-item in the first term and this percentage slightly increased in the second term (13.2%).

Results of the world belonging sub-scale indicated that a notable percentage of students agreed or strongly agreed with the sub-item "I feel close to people in the world" in the first term (38.9%), though the percentage slightly decreased in the second term (34.8%). However, 11.9% of students disagreed or strongly disagreed with this sub-item in the first term, and this number slightly increased in the second term (13.4%). Similarly, a substantial percentage of students agreed or strongly agreed with the sub-item "I feel like I am part of the world" in the first term (64.6%), though the percentage slightly decreased in the second term (55.0%). Additionally, 5.2% of students disagreed or strongly disagreed with this sub-item in the second term, which slightly increased compared to the first term (4.5%). Finally, a substantial percentage of students agreed or strongly agreed with the sub-item "I am happy to be in the world" in the first term (60.4%), though the percentage slightly decreased in the second term (53.0%). Additionally, 10.4% of students disagreed or strongly disagreed with this sub-item in the first term and slightly increased in the second term (7.9%).

Based on the results presented, it appears that students' sense of belonging to different levels (i.e., school, city, country, and world) may change over time. In general, there was a slight decrease in the percentage of students who reported on their perception of belonging across four levels in the second term compared to the first term. However, it's important to note that even in the second term, a substantial or notable percentage of students still reported that they agreed or strongly agreed with their school, city, national, and world belonging.

 Table 6

 Percentage of Students' Senses of Belonging Agreement across Two Terms

Scale		ngly gree	Disa	igree	Neutral		Agree		Strongly agree	
	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$

School belonging

I feel close to people at this school.	2.3	2.9	5.4	7.8	32.6	44.8	41.0	31.0	18.6	13.5
I feel like I am part of this school.	2.0	3.3	2.4	4.1	27.6	41.5	43.6	34.3	24.3	16.8
I am happy to be at this school.	3.3	5.7	4.0	6.1	36.3	45.6	36.2	30.2	20.2	12.4
City belonging										
I feel close to people in Hong Kong.	1.2	1.9	2.7	4.0	33.9	42.3	38.6	33.7	23.6	18.2
I feel like I am part of Hong Kong.	1.5	1.7	0.9	1.2	22.7	35.2	41.6	38.4	33.2	23.5
I am happy to be in Hong Kong.	1.6	1.9	3.8	3.1	27.9	37.0	37.9	34.4	28.7	23.5
Country belonging	•									
I feel close to people in China.	5.0	5.3	7.5	7.2	35.0	40.2	26.7	28.1	25.8	19.2
I feel like I am part of China.	5.3	5.1	4.9	6.8	33.7	39.8	26.9	25.8	29.1	22.5
I am happy to be in China.	5.7	5.8	4.6	7.4	34.0	38.9	26.4	23.5	29.2	24.3
World belonging										
I feel close to people in the world.	3.8	3.1	8.1	10.3	49.3	51.7	26.5	22.6	12.4	12.2
I feel like I am part of the world.	2.1	2.3	2.4	2.9	30.9	39.9	37.3	30.3	27.3	24.7
I am happy to be in the world.	3.0	3.5	4.9	6.9	31.8	36.5	33.9	30.3	26.4	22.7

Senses of Identity. The results of students' reports on the sense of identity in the first and second school terms are summarized in Table 7. In general, students agreed with their school identity with their reports in Time 1 slightly higher than their reports in Time 2 ( $M_{Time1} = 3.49$ ,  $SD_{Time1} = 0.95$ ;  $M_{Time2} = 3.34$ ,  $SD_{Time2} = 0.99$ ; t = 5.53; p < .001). In addition, students agreed with their Hong Kong identity ( $M_{Time1} = 3.79$ ,  $SD_{Time1} = 0.95$ ;  $M_{Time2} = 3.79$ ,  $SD_{Time2} = 0.93$ ), and there was no significant difference across the two-time points (t = -0.45; p = .655). Similarly, overall, students agreed with their Chinese identity ( $M_{Time1} = 3.35$ ,  $SD_{Time1} = 1.11$ ;  $M_{Time2} = 3.56$ ,  $SD_{Time2} = 1.09$ ) and it remained stable across two-time points (t = -1.69; t = -1.69). Finally, students agreed with their global identity with their reports in Time 2 slightly higher than that in Time 1 (t = -1.69) and t = -1.69; t = -1.69; t = -1.69; t = -1.69; t = -1.69.

The results suggested that students' agreement with their school identity decreased slightly from Time 1 to Time 2, while their agreement with their Hong Kong and Chinese identities remained relatively stable across the two-time points. Additionally, students' agreement with their global identity increased slightly from Time 1 to Time 2.

**Table 7**Students' Senses of Identity across Two Terms

Scale	Actual	1 <sup>st</sup> term		2 <sup>nd</sup> term		
	range	M	SD	M	SD	
The term [school name]'s student describes me well.	1-5	3.49	0.95	3.34	0.99	
The term Hongkonger describes me well.	1-5	3.79	0.95	3.79	0.93	
The term Chinese describes me well.	1-5	3.35	1.11	3.56	1.09	
The term global citizen describes me well.	1-5	3.61	0.92	3.68	0.97	

According to Table 8, the results showed that students generally agreed with their identity across levels, with the highest level of agreement with their city identity, followed by their global identity, national identity, and school identity. Most of the students agreed or strongly agreed with their Hong Kong identity in the first term (57.4%), and more students agreed with it in the second term (60.8%). Conversely, only a small percentage of students disagreed or strongly disagreed with their city identity in both terms (5.3%).

Furthermore, more than half of the students agreed or strongly agreed with their global identity (50.2%), and this proportion increased in the second term (52.8%). In contrast, 6.6% of students disagreed or strongly disagreed with the global identity in the first term, and this percentage slightly increased in the second term (7.0%). The increase in agreement was also shown in students' national identity, with 47.5% in the first term and 49.4% in the second term. Although the percentage of students disagreeing with their national identity was the highest among the four levels (14.2%), it still decreased in the second term (11.9%).

Finally, as for students' agreement with their school identity, a substantial percentage of students agreed or strongly agreed with their school identity in the first term (46.9%), though the

percentage slightly decreased in the second term (38.9%). However, there were still 9.6% of students disagreed or strongly disagreed with this sub-item in the first term, and this number slightly increased in the second term (13.7%).

 Table 8

 Percentage of Students' Senses of Identity Agreement across Two Terms

Scale		ngly gree	Disagree		Neutral		Ag	Agree		ngly ree
	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$	$1^{st}$	$2^{nd}$
The term [school name]'s student describes me well.	3.8	5.4	5.8	8.3	43.6	46.5	31.5	26.7	15.4	13.1
The term Hongkonger describes me well.	1.7	1.9	3.6	3.4	37.4	34.0	29.2	35.2	28.2	25.6
The term Chinese describes me well.	6.2	5.6	8.0	6.3	38.3	38.8	24.9	25.3	22.6	24.1
The term global citizen describes me well.	2.3	2.5	4.3	4.5	43.3	40.1	30.7	28.5	19.5	24.3

**Personal Characteristics.** The results of students' reports on the intensity of them experiencing positive (i.e., alert, inspired, determined, attentive, and active) and negative affect (i.e., upset, hostile, ashamed, nervous, and afraid) in the first and second academic terms were summarized in Table 9. In general, students reported occasionally experiencing positive affect in the first term ( $M_{Time1}$ = 2.84), and they experienced them less intensely in the second term ( $M_{Time2}$  = 2.72).

Comparatively, students experienced negative affect less often but still felt them occasionally ( $M_{Time1} = 2.48$ ). In particular, they rarely felt upset ( $M_{Time1} = 2.39$ ), hostile ( $M_{Time1} = 2.66$ ), afraid ( $M_{Time1} = 2.66$ ), and ashamed ( $M_{Time1} = 2.91$ ) in the first term but felt nervous sometimes ( $M_{Time1} = 3.00$ ). Similar to positive emotions, students experienced negative emotions less intensely in the second term.

**Table 9**Students' Positive and Negative Affect Schedule across Two Terms

Scale	Actual	1 <sup>st</sup> term	2 <sup>nd</sup> term

	range	M	SD	M	SD
Positive affect (overall)	1-5	2.84	0.80	2.72	0.74
alert	1-5	2.39	1.15	2.22	1.08
inspired	1-5	2.66	1.10	2.55	1.07
determined	1-5	2.91	1.15	2.77	1.09
attentive	1-5	3.08	1.09	2.98	1.02
active	1-5	3.18	1.15	3.09	1.18
Negative affect (overall)	1-5	2.48	0.90	2.34	0.87
upset	1-5	2.74	1.16	2.61	1.13
hostile	1-5	2.16	1.20	2.05	1.10
ashamed	1-5	2.19	1.11	2.08	1.07
nervous	1-5	3.00	1.23	2.76	1.19
afraid	1-5	2.33	1.18	2.20	1.16

Table 10 summarized the results of students' reports on their personalities (i.e., extraversion, agreeableness, conscientiousness, neuroticism, and openness) in the first and second school terms. In the first term, students tended to be more open to changes ( $M_{Time1} = 3.67$ ) and agreeable ( $M_{Time1} = 3.50$ ), while their conscientiousness ( $M_{Time1} = 3.09$ ), neuroticism ( $M_{Time1} = 2.93$ ), and extraversion ( $M_{Time1} = 2.97$ ) scores were close to neutral. Although students appeared to be less open and agreeable in the second term, they remained generally open-minded ( $M_{Time2} = 3.63$ ) and amiable ( $M_{Time2} = 3.45$ ).

Table 10
Students' Personality across Two Terms

Scale	Actual	1 <sup>st</sup> 1	term	2 <sup>nd</sup> term	
	range	M	SD	M	SD
Extraversion (overall)	1-5	2.97	0.84	3.04	0.83
I see myself as extraverted.	1-5	3.14	1.12	3.25	1.09
I see myself as quiet. (reversed)	1-5	2.81	1.05	2.83	1.00
Agreeableness (overall)	1-5	3.50	0.69	3.45	0.69
I see myself as friendly.	1-5	3.81	0.85	3.79	0.87
I see myself as picky. (reversed)	1-5	3.19	1.06	3.11	0.99
Conscientiousness (overall)	1-5	3.09	0.76	3.02	0.71
I see myself as self-disciplined.	1-5	2.94	0.96	2.89	0.89
I see myself as disorganized. (reversed)	1-5	3.24	0.99	3.16	0.96

Neuroticism (overall)	1-5	2.93	0.76	2.96	0.74
I see myself as anxious, easily upset.	1-5	3.05	1.10	3.08	1.09
I see myself as calm. (reversed)	1-5	2.82	0.93	2.84	0.92
Openness (overall)	1.5-5	3.67	0.70	3.63	0.68
I see myself as open to new experiences.	1-5	3.74	0.94	3.66	0.88
I see myself as conventional. (reversed)	1-5	3.59	0.99	3.60	0.99

**Value.** Table 11 summarized the results of students' reports on their value to their school in the first and second school terms for multiple items. In general, students agreed with the importance of using Cantonese in school ( $M_{Time1} = 4.04$ ) in the first term but slightly disagreed with the importance of using Mandarin ( $M_{Time1} = 2.95$ ). Additionally, students believed in the importance of studying the school's culture ( $M_{Time1} = 3.53$ ) and history ( $M_{Time1} = 3.35$ ), as well as using English in school ( $M_{Time1} = 3.55$ ).

Table 11
Students' Value to School Culture, History, and Languages

Scale	Actual	1 <sup>st</sup> term		2 <sup>nd</sup> term	
	range	M	SD	M	SD
Studying my school's culture is important.	1-5	3.53	0.88	3.27	0.91
Studying my school's history is important.	1-5	3.35	0.97	3.17	0.98
Using Cantonese in school is important.	1-5	4.04	0.90	3.97	0.88
Using Mandarin in school is important.	1-5	2.95	1.10	2.84	1.05
Using English in school is important.	1-5	3.55	1.00	3.50	0.93

Table 12 summarized the results of students' perceived value towards the city across the first and second school terms. Overall, students valued using Cantonese in Hong Kong ( $M_{Time1}$  = 4.14) the most in the first term. Although there was a slight decrease in the second term, it remained as the most important value. Additionally, students generally agreed on the importance of studying Hong Kong culture ( $M_{Time1}$  = 3.79) and history ( $M_{Time1}$  = 3.70), as well as using English in Hong Kong ( $M_{Time1}$  = 3.74). Although their agreement on the importance of studying Hong Kong culture

 $(M_{Time2} = 3.67)$  and history  $(M_{Time2} = 3.61)$  decreased slightly in the second term, students still tended to agree with these values overall.

On the other hand, students' perceived value of using Mandarin in Hong Kong was just close to the neutral level in the first term ( $M_{Time1} = 2.99$ ) and remained neutral in the second term ( $M_{Time2} = 2.96$ ). This suggested that students did not show a strong preference of using Mandarin in Hong Kong across the two terms.

Table 12
Students' Value to City's Culture, History, and Languages

Scale	Actual	1st term		2 <sup>nd</sup> term	
	range	M	SD	M	SD
Studying Hong Kong culture is important.	1-5	3.79	0.89	3.67	0.88
Studying Hong Kong's history is important.	1-5	3.70	0.95	3.61	0.89
Using Cantonese in Hong Kong is important.	1-5	4.14	0.88	4.01	0.90
Using Mandarin in Hong Kong is important.	1-5	2.99	1.03	2.96	0.99
Using English in Hong Kong is important.	1-5	3.74	0.97	3.66	0.95

The results of students' reports on perceived value to the country across the first and second school terms were summarized in Table 13. In general, students believed that studying Chinese culture ( $M_{Time1} = 3.61$ ) and Chinese history ( $M_{Time1} = 3.53$ ) were both important. Although the means of learning Chinese culture and history slightly decreased in the second term, students consistently agreed with these two values in general. These findings may reflect the importance students placed on understanding and appreciating their country's rich cultural and historical heritage.

**Table 13**Students' Values for Chinese Culture and History

Scale	Actual	1 <sup>st</sup> term		2 <sup>nd</sup> 1	term
	range	M	SD	M	SD
Studying Chinese culture is important.	1-5	3.61	1.04	3.53	0.99

1-5

1.01

1.02

The results of students' reports on their perceived value to the world across the first and second school terms were summarized in Table 14. In the first term, students generally agreed to all the values of the world, including the importance of studying global civilization ( $M_{Timel} = 3.83$ ), studying the world's history ( $M_{Timel} = 3.66$ ), using Chinese in the current world ( $M_{Timel} = 3.66$ ), using English in the current world ( $M_{Timel} = 3.89$ ), and using multiple languages in the current world ( $M_{Timel} = 3.86$ ). Specifically, the mean value of using English in the current world was more stable across two terms than that of using Chinese and multiple languages, showing students' consistent agreement concerning the importance of English.

**Table 14**Students' Value for Global Civilization, History, and Languages

Scale	Actual	1st term		2 <sup>nd</sup> term	
	range	M	SD	M	SD
Studying global civilization is important.	1-5	3.83	0.92	3.70	0.89
Studying the world's history is important.	1-5	3.66	0.98	3.56	0.96
Using Chinese in the current world is important.	1-5	3.66	0.94	3.54	0.92
Using English in the current world is important.	1-5	3.89	1.04	3.83	0.99
Using multiple languages in the current world is important.	1-5	3.86	0.92	3.78	0.94

**Emotion.** The results of students' reports on their empathy and sympathy in the first and second school terms were summarized in Table 15. On average, students demonstrated a moderate level of cognitive empathy ( $M_{Time1} = 3.42$ ) and sympathy ( $M_{Time1} = 3.41$ ) in the first term. In contrast, they had a relatively lower level of affective empathy ( $M_{Time1} = 2.94$ ) in the first term, and this level remained stable in the second term ( $M_{Time2} = 2.94$ ).

Table 15
Students' Levels of Empathy and Sympathy across Two Terms

Scale	Actual	1 <sup>st</sup> t	erm	2 <sup>nd</sup> term	
	range	M	SD	M	SD
Cognitive empathy (overall)	1-5	3.42	0.82	3.45	0.81
I understand how people feel before they tell me.	1-5	3.31	0.91	3.32	0.87
I know when a friend is angry even if he/she tries to hide it.	1-5	3.52	1.05	3.60	1.00
I know when someone acts happy but is not really happy.	1-5	3.45	1.10	3.47	1.05
I know how others feel.	1-5	3.41	1.01	3.41	0.98
Affective empathy (overall)	1-5	2.94	0.87	2.94	0.87
When my friend is scared, I feel scared too.	1-5	2.73	1.01	2.72	0.99
When my friend is sad, I feel sad too.	1-5	3.07	1.09	3.04	1.06
When my friend is angry, I feel angry too.	1-5	2.93	1.08	2.99	1.05
When people around me are nervous, I become nervous too.	1-5	3.04	1.09	3.03	1.09
Sympathy (overall)	1-5	3.41	0.86	3.35	0.86
I feel sorry for someone who is treated unfairly.	1-5	3.61	1.04	3.52	1.04
I feel concerned for other people who are sick.	1-5	3.23	1.06	3.16	1.00
I am concerned for animals that are hurt.	1-5	3.50	1.15	3.46	1.14
I feel sorry for a friend who feels sad.	1-5	3.29	1.07	3.26	1.07

The results of students' reports on their emotional experience in the class between the first and second school terms were summarized in Table 16. Overall, the findings suggested that students generally had positive emotional experiences in class, with a relatively high levels of enjoyment  $(M_{Timel} = 3.64)$  and low levels of anger  $(M_{Timel} = 1.94)$  and anxiety  $(M_{Timel} = 2.43)$ .

Table 16
Students' Emotional Experience in Class across Two Terms

Scale	Actual	1 <sup>st</sup> t	erm	2 <sup>nd</sup> 1	term
	range	M	SD	M	SD
Enjoyment (overall)	1-5	3.64	0.79	3.57	0.84
I enjoy being in his/her class.	1-5	3.68	0.91	3.62	0.93
I look forward to learning a lot in his/her class.	1-5	3.66	0.90	3.56	0.93

I enjoy participating in his/her class.	1-5	3.59	0.92	3.51	0.95
Anger (overall)	1-5	1.94	0.81	2.01	0.83
I am angry.	1-5	2.02	0.92	2.11	0.97
When I think of his/her class, I get angry.	1-5	1.94	0.96	2.02	0.95
I feel anger welling up in me.	1-5	1.88	0.92	1.91	0.93
Anxiety (overall)	1-5	2.43	0.80	2.42	0.83
I feel nervous in his/her class.	1-5	2.31	1.02	2.37	0.94
I worry whether I can understand his/her lesson.	1-5	2.82	1.12	2.78	1.09
I get tense in his/her class.	1-5	2.15	1.00	2.14	0.99

**Motivation.** The results of students' reports on their academic effort and procrastination between the first and second school terms were presented in Table 17. It was found that students generally put a moderate level of effort towards their academic work in the first term ( $M_{Timel} = 3.38$ ), which maintained in the second term ( $M_{Timel} = 3.37$ ).

However, the results also suggested that students may struggle with procrastination to some extent in the first term ( $M_{Timel} = 3.13$ ) and such a tendency was a little bit more serious in the second term ( $M_{Timel} = 3.31$ ). Particularly, students tended to be inattentive when doing schoolwork ( $M_{Timel} = 3.30$ ;  $M_{Timel} = 3.30$ ).

**Table 17**Students' Level of Academic Effort and Procrastination across Two Terms

Scale	Actual	1 <sup>st</sup> t	erm	2 <sup>nd</sup> 1	term
	range	M	SD	M	SD
Academic effort (overall)	1-5	3.38	0.73	3.37	0.74
I try hard to make sure that I am good at my schoolwork.	1-5	3.30	0.89	3.32	0.89
When I am improving in my schoolwork I try even harder.	1-5	3.57	0.86	3.54	0.86
I am always trying to do better in my schoolwork.	1-5	3.27	0.88	3.27	0.86
Academic Procrastination (overall)	1-5	3.13	0.90	3.31	0.84
I put off projects until the last minute.	1-5	3.09	1.10	3.28	1.04
I get distracted by other, more fun, things instead of doing schoolwork.	1-5	3.30	1.01	3.47	0.95

Table 18 summarized the results of students' reports on their political interests in the first and second school terms. The findings suggested that students were generally interested in current issues across two terms ( $M_{Time1} = 3.20$ ;  $M_{Time2} = 3.17$ ) indicating a sustained interest with political affairs over time. Students reported a relatively higher level of interest in examining current issues critically ( $M_{Time1} = 3.33$ ), suggesting that students were interested in exploring current issues thoughtfully.

Table 18
Students' Political Interest across Two Terms

Scale	Actual	1 <sup>st</sup> term		2 <sup>nd</sup> term	
	range	M	SD	M	SD
Overall	1-5	3.20	0.78	3.17	0.82
I am interested in current affairs.	1-5	3.14	0.94	3.12	0.94
I am interested in discussions about current affairs.	1-5	3.13	0.95	3.10	0.98
I am interested in critically examining current issues.	1-5	3.33	0.92	3.29	0.96

**Environmental Quality.** The results of students' reports on their perceived safety, respect, and diversity in the first and second school terms were summarized in Table 19.

In terms of perceived safety, students felt safe across levels, with the highest perceived safety in Hong Kong ( $M_{Timel1} = 3.61$ ), followed by the school ( $M_{Timel} = 3.59$ ), China ( $M_{Timel} = 3.55$ ), and the World ( $M_{Timel} = 3.22$ ). Concerning their perceived respect, students reported the highest perception of respect in the school ( $M_{Timel} = 3.69$ ) and Hong Kong ( $M_{Timel} = 3.69$ ), followed by the world ( $M_{Timel} = 3.62$ ) and China ( $M_{Timel} = 3.57$ ). Although students' perception of respect in China was slightly lower than the other three levels, their overall perception of respect in China was still positive (above the neutral level).

As for their perceived diversity, students believed that the world is the most diverse ( $M_{Time1}$  = 3.95), followed by Hong Kong ( $M_{Time1}$  = 3.81), the school ( $M_{Time1}$  = 3.73), and China ( $M_{Time1}$  = 3.68). Although students' perception of diversity in China's diversity was lower than the other three levels, they still tended to agree that China is full of variety (above the neutral level). These findings indicated that students generally perceived their school, city, country, and the world as safe, respectful, and diverse. The results also suggested that students felt relatively more respected and safer in their school and city (Hong Kong) than in other places.

Table 19
Students' Perceived Safety, Respect, and Diversity across Two Terms

Scale	Actual	1 <sup>st</sup> t	erm	$2^{\text{nd}}$	term
	range	M	SD	M	SD
Perceived safety (overall)					
My school is a safe place.	1-5	3.59	0.91	3.47	0.93
Hong Kong is a safe place.	1-5	3.61	0.91	3.57	0.98
China is a safe place.	1-5	3.55	1.09	3.48	1.05
The world is a safe place.	1-5	3.22	1.07	3.22	1.04
Perceived respect (overall)					
I feel respected in my school.	1-5	3.69	0.86	3.60	0.86
I feel respected in Hong Kong.	1-5	3.69	0.84	3.64	0.86
I feel respected in China.	1-5	3.57	1.02	3.50	0.97
I feel respected in the world.	1-5	3.62	0.84	3.59	0.84
Perceived diversity (overall)					
My school is full of diversity.	1-5	3.73	0.90	3.58	0.94
Hong Kong is full of diversity.	1-5	3.81	0.83	3.73	0.83
China is full of diversity.	1-5	3.68	1.05	3.64	1.01
The world is full of diversity.	1-5	3.95	0.85	3.84	0.87

The results of students' reports on their use of various media in the first and second school terms were summarized in Table 20. In average, students reported a relatively low frequency of consuming news, regardless of the platforms they used. Comparing among the three groups of platforms, students received news from international social media most frequently ( $M_{Time1} = 2.71$ ) in the first term, followed by the Chinese news platforms and social media ( $M_{Time1} = 2.21$ ), and other

Hong Kong and international news platforms ( $M_{Timel} = 1.93$ ). The frequency did not show great changes in the second term.

Remarkably, a few media channels had a relatively high frequency of usage among our secondary school students. The most frequently used media was YouTube ( $M_{Time1} = 3.56$ ), followed by Instagram ( $M_{Time1} = 3.15$ ) and TVB News ( $M_{Time1} = 2.88$ ). These platforms provided news in the form of videos or pictures. Media platforms with similar formats, such as TikTok ( $M_{Time2} = 2.42$ ), Bilibili ( $M_{Time2} = 2.27$ ), and Now TV/ Viu TV News ( $M_{Time1} = 2.40$ ), also showed a relatively high frequency of usage.

Table 20
Students' Consumption of News via Different Platforms across Two Terms

Scale	Actual	1 <sup>st</sup> t	erm	2 <sup>nd</sup> term	
	range	M	SD	M	SD
Hong Kong and international news platforms (overall)	1-5	1.93	0.72	1.86	0.73
Now TV News / Viu TV News	1-5	2.40	1.20	2.24	1.18
Commercial Radio News	1-5	1.82	0.96	1.70	0.96
TVB News	1-5	2.88	1.32	2.81	1.31
RTHK News	1-5	2.11	1.17	1.88	1.07
Yahoo! News	1-5	1.67	0.91	1.59	0.88
BBC News	1-5	1.84	1.05	1.77	1.06
South China Morning Post	1-5	1.63	0.93	1.61	0.96
i-CABLE News	1-5	1.99	1.16	1.88	1.10
am730	1-5	1.52	0.88	1.51	0.89
Headline Daily	1-5	1.97	1.06	1.87	1.04
Cable News Network (CNN)	1-5	1.63	0.72	1.55	0.88
Oriental Daily News / on.cc	1-5	1.93	1.03	1.82	1.02
Ming Pao	1-5	1.87	1.05	1.79	1.03
HK01	1-5	2.07	1.23	2.06	1.22
Sing Tao Daily	1-5	1.87	1.05	1.79	1.01
Chinese news platforms and social media (overall)	1-5	2.21	1.10	2.18	1.07
Weibo	1-5	1.97	1.25	1.91	1.21
China Central Television (CCTV)	1-5	2.00	1.19	1.90	1.18
WeChat	1-5	2.62	1.52	2.62	1.55

TikTok	1-5			2.42	1.60
Bilibili	1-5			2.27	1.47
Xiaohongshu	1-5			2.03	1.42
International social media (overall)	1-5	2.71	0.92	2.74	0.91
Facebook	1-5	2.03	1.11	2.01	1.11
Twitter	1-5	2.05	1.22	2.06	1.25
Instagram	1-5	3.15	1.51	3.36	1.51
YouTube	1-5	3.56	1.32	3.56	1.30

**Activities.** Table 21 presented the results of students' reports on their participation in activities across different levels (i.e., school, community, city, country, and world) during the first and second school terms. Students reported a moderate level of participation in school activities  $(M_{Time1} = 2.91)$  and community  $(M_{Time1} = 2.67)$  in general. Comparatively, students seldom participated in activities in China  $(M_{Time1} = 2.10)$ , followed by international activities  $(M_{Time1} = 2.04)$ .

**Table 21**Students' Participation in Activities across Two Terms

Scale	Actual	1 <sup>st</sup> t	1 <sup>st</sup> term		2 <sup>nd</sup> term	
	range	M	SD	M	SD	
School	1-5	2.91	0.90	2.73	0.94	
Extracurricular activities	1-5	3.25	1.01	3.17	1.06	
Post-related duties	1-5	2.90	1.26	2.62	1.26	
Inter-house competition	1-5	2.59	1.13	2.41	1.14	
Community	1-5	2.67	0.94	2.46	0.95	
Community activities	1-5	2.54	1.05	2.32	1.06	
Hang out with friends	1-5	2.80	1.15	2.59	1.13	
City	1-5	2.01	0.81	2.06	0.79	
Volunteer activities	1-5	2.03	1.02	2.07	1.00	
Interschool non-academic activities	1-5	2.08	1.11	2.19	1.10	
Interschool academic activities	1-5	1.93	1.02	1.93	0.98	
Country	1-5	2.10	0.89	2.10	0.88	
Go to Mainland China	1-5	2.67	1.28	2.69	1.32	
Academic activities in Mainland China	1-5	1.54	0.87	1.52	0.84	
World	1-5	2.04	0.75	1.98	0.75	

Travel to other countries	1-5	2.11	0.98	2.10	0.97
Communicate with friends/relatives	1-5	2.36	1.17	2.22	1.18
International academic activities	1-5	1.62	0.86	1.62	0.87

Table 22 summarized students' willingness to participate in social curriculum and cocurriculum activities in the second school term. The results suggested that students were more interested in participating in school tours within Hong Kong ( $M_{Time1} = 3.24$ ), followed by those in the mainland China ( $M_{Time1} = 3.02$ ) and overseas ( $M_{Time1} = 2.97$ ).

In contrast, students were less interested in helping the school host visitors, regardless of where they were from (in average, they were all below the neutral level). Comparing across these levels, they were the least willing to host visitors from the mainland China (M = 2.77), followed closely by hosting people from local organizations (M = 2.83), and from other countries (M = 2.84). In addition, the data revealed that students were more interested in participating in activities at the city level (M = 3.03), while were less engaged to join activities at the country (M = 2.90) or the world level (M = 2.90).

 Table 22

 Students' Willingness to Participate in Social Curriculum and Co-curriculum Activities

Scale	Actual range	M	SD
City level activities (overall)	1-5	3.03	0.99
Participating in school tours in Hong Kong	1-5	3.24	1.09
Helping my school host visitors from other schools/organizations in Hong Kong	1-5	2.83	1.15
Country level activities (overall)	1-5	2.90	1.15
Participating in school tours in Mainland China	1-5	3.02	1.27
Helping my school host visitors from schools/organizations in Mainland China	1-5	2.77	1.21
World level activities (overall)	1-5	2.90	1.14
Participating in international exchange activities	1-5	2.97	1.27
Helping my school host international visitors	1-5	2.84	1.18

**Social Interactions.** The results of students' reports on their social interactions with other people (i.e., peers, teachers, parents, city, country, and world) in the first and second school terms were summarized in Table 23. It was found that students reported the closest relationships with their parents ( $M_{Timel} = 3.26$ ), followed by people in the city ( $M_{Timel} = 3.20$ ), their teachers ( $M_{Timel} = 3.19$ ), their peers ( $M_{Timel} = 3.13$ ), people in the country ( $M_{Timel} = 2.86$ ; below the neutral level), and people in the world ( $M_{Timel} = 2.36$ ; below the neutral level). Students tended to interact positively with peers, teachers, parents, and people in the city while having poorer relationships with people in the country and the world.

Table 23
Students' Social interaction in Two Terms

Scale	Actual	1 <sup>st</sup> t	erm	$2^{\mathrm{nd}}$	term
	range	M	SD	M	SD
Peers (overall)	1-5	3.13	0.89	3.16	0.88
My classmates care about my feelings.	1-5	3.08	0.98	3.13	0.94
My classmates like me.	1-5	3.18	0.95	3.20	0.94
Teachers (overall)	1-5	3.19	0.85	3.21	0.84
My teachers like me.	1-5	3.15	0.90	3.18	0.91
My teacher cares about me.	1-5	3.23	0.92	3.25	0.89
Parents (overall)	1-5	3.26	0.96	3.32	0.92
My parents try to compromise when we disagree.	1-5	3.07	1.09	3.12	1.05
My parents give me a lot of attention.	1-5	3.44	1.07	3.51	1.02
City (overall)	1-5	3.20	0.86	3.27	0.82
People in Hong Kong will help me when I am in trouble.	1-5	3.09	0.99	3.18	0.94
I have good relationships with people in Hong Kong.	1-5	3.24	0.95	3.31	0.90
People in Hong Kong are nice to me.	1-5	3.28	0.93	3.31	0.91
Country (overall)	1-5	2.86	1.30	2.92	1.25
I have close family members living in Mainland China.	1-5	3.12	1.40	3.12	1.36
I have good friends living in Mainland China.	1-5	2.61	1.48	2.71	1.42
World (overall)	1-5	2.36	1.13	2.57	1.15
I have good friends living in other countries.	1-5	2.46	1.34	3.68	1.34

## Gender Difference

Senses of Belonging. The results of the *t*-test comparing the difference in the sense of belonging across four levels (i.e., school, city, country, and world) between boys and girls in secondary schools were presented in Table 24. There were no gender differences in their overall perceived school belonging ( $M_{male} = 3.76$ ,  $M_{female} = 3.73$ ), city belonging ( $M_{male} = 3.95$ ,  $M_{female} = 3.89$ ), country belonging ( $M_{male} = 3.62$ ,  $M_{female} = 3.73$ ), and the world belonging ( $M_{male} = 3.69$ ,  $M_{female} = 3.62$ ). This indicated that both boys and girls in secondary schools had a comparable level of belonging in their school, city, country, and the world.

**Table 24**Gender Differences in Students' Senses of Belonging

Scale	M	Male		Female		est	Result of comparison
	M	SD	M	SD	t	p	
School belonging	3.76	0.80	3.73	7.46	0.64	.520	n.s.
City belonging	3.95	0.80	3.89	0.70	1.45	.148	n.s.
Country belonging	3.62	1.08	3.73	1.00	-1.80	.072	n.s.
World belonging	3.69	0.84	3.62	0.76	1.55	.123	n.s.

*Note.* n.s. = not significant

Senses of Identity. Table 25 presented the results of a *t*-test comparing the difference in the sense of identity across four levels (i.e., school, city, country, and world) between boys and girls in secondary schools. The results suggested that boys and girls had comparable senses of school identity ( $M_{male} = 3.54$ ,  $M_{female} = 3.46$ ) and world identity ( $M_{male} = 3.64$ ,  $M_{female} = 3.59$ ), with no statistically significant difference. Additionally, although both boys and girls tended to acknowledge their perceived sense of city identity ( $M_{male} = 3.85$ ,  $M_{female} = 3.73$ ) and country identity ( $M_{male} = 3.64$ ,  $M_{female} = 3.59$ ), significant differences in city identity (p = .035) and country identity (p = .044) were found between these two groups of students. To be specific, boys had a stronger sense of city identity, but a weaker sense of country identity compared to girls.

**Table 25**Gender Differences in Students' Senses of Identity

Scale	Male		Female		t-test		Result of comparison
	M	SD	M	SD	t	p	
The term [school name]'s student describes me well.	3.54	0.95	3.46	0.94	1.47	.141	n.s.
The term Hongkonger describes me well.	3.85	0.97	3.73	0.92	2.12	.035	Male > Female
The term Chinese describes me well.	3.44	1.15	3.57	1.06	-2.02	.044	Female > Male
The term global citizen describes me well.	3.64	0.98	3.59	0.85	0.99	.321	n.s.

**Personal Characteristics.** The results of *t*-test comparing the differences in the overall positive and negative affect between boys and girls in secondary schools were presented in Table 26. Boys and girls reported similar affect ( $M_{male} = 2.85$ ,  $M_{female} = 2.82$ ). Additionally, boys were found to experience less negative emotion ( $M_{male} = 2.38$ ) compared to girls ( $M_{female} = 2.57$ ; t = -3.59; p < .001).

**Table 26**Gender Differences in Students' Positive and Negative Affect Schedules

Scale	Ma	Male		Female		est	Result of comparison
	M	SD	M	SD	t	p	
Positive affect	2.85	0.85	2.82	0.73	0.70	.483	n.s.
Negative affect	2.38	0.92	2.57	0.86	-3.59	<.001	Female > Male

*Note.* n.s. = not significant

Table 27 presented the results of a t-test that was conducted to investigate whether there were any gender differences in personalities of secondary school students. The results suggested no significant differences concerning their agreeableness ( $M_{male} = 3.52$ ,  $M_{female} = 3.48$ ) and openness to change ( $M_{male} = 3.67$ ,  $M_{female} = 3.66$ ). However, boys tended to be more extroverted ( $M_{male} = 3.02$ ,  $M_{female} = 2.92$ ; t = 1.96; p = .050) and conscientious ( $M_{male} = 3.15$ ,  $M_{female} = 3.03$ ; t = .2.64; p = .008), whereas girls were more neurotic ( $M_{male} = 2.80$ ,  $M_{female} = 3.07$ ; t = -6.08; p < .001).

**Table 27**Gender Differences in Students' Personalities

Scale	Male	Male		Female			Result of comparison
	M	SD	M	SD	t	p	
Extraversion	3.02	0.81	2.92	0.85	1.96	.050	Male > Female
Agreeableness	3.52	0.73	3.48	0.65	1.03	.302	n.s.
Conscientiousness	3.15	0.78	3.03	0.74	2.64	.008	Male > Female
Neuroticism	2.80	0.75	3.07	0.73	-6.08	<.001	Female > Male
Openness	3.67	0.71	3.66	0.69	0.15	.880	n.s.

Values. The results of a *t*-test comparing the difference in the perceived value towards school between boys and girls were summarized in Table 28. Both groups of students agreed on the importance of studying their schools' culture ( $M_{male} = 3.53$ ,  $M_{female} = 3.53$ ) and history ( $M_{male} = 3.36$ ,  $M_{female} = 3.35$ ), with no statistically significant difference. Regarding the importance of languages in school, there were no significant differences in using Cantonese, Mandarin, and English between boys and girls. It should be noted that both boys and girls in secondary schools in Hong Kong considered the use of Cantonese in schools to be important ( $M_{male} = 4.40$ ,  $M_{female} = 4.06$ ), followed using English ( $M_{male} = 3.52$ ,  $M_{female} = 3.58$ ). However, they both perceived using Mandarin as less important ( $M_{male} = 2.94$ ,  $M_{female} = 2.96$ ; below the neutral level).

**Table 28**Gender Differences in Students' Value of School's Culture, History, and Languages

Scale	Male	Male		Female			Result of comparison
	M	SD	M	SD	t	p	
Studying my school's culture is important.	3.53	0.95	3.53	0.79	-0.16	.871	n.s.
Studying my school's history is important.	3.36	1.00	3.35	0.94	0.17	.869	n.s.
Using Cantonese in school is important.	4.04	0.94	4.06	0.86	-0.51	.613	n.s.
Using Mandarin in school is important.	2.94	1.15	2.96	1.04	-0.23	.820	n.s.

Using English in school is important.

3.52 1.04 3.58 0.95 -1.08 .281 n.s.

 $\overline{Note}$ . n.s. = not significant

Table 29 showed the results of a *t*-test comparing the difference in the value for the city between boys and girls in secondary schools. Both boys and girls agreed with the importance of studying Hong Kong culture ( $M_{male} = 3.77$ ,  $M_{female} = 3.81$ ) and history ( $M_{male} = 3.71$ ,  $M_{female} = 3.69$ ), with no statistically significant difference. There was also no significant difference in using Cantonese, Mandarin, and English in Hong Kong between the two groups of students. Additionally, both boys and girls considered the use of Cantonese to be the most important among the three languages ( $M_{male} = 4.17$ ,  $M_{female} = 4.11$ ), followed by English ( $M_{male} = 3.73$ ,  $M_{female} = 3.75$ ) and then Mandarin ( $M_{male} = 2.95$ ,  $M_{female} = 3.04$ ).

Table 29

Gender Differences in Students' Value of City's Culture, History, and Languages

Scale	Male		Female		t-test		Result of comparison
	M	SD	M	SD	t	p	
Studying Hong Kong culture is important.	3.77	0.93	3.81	0.85	-0.78	.438	n.s.
Studying Hong Kong's history is important.	3.71	0.99	3.69	0.89	0.40	.690	n.s.
Using Cantonese in Hong Kong is important.	4.17	0.90	4.11	0.85	1.32	.188	n.s.
Using Mandarin in Hong Kong is important.	2.95	1.08	3.04	0.98	-1.40	.162	n.s.
Using English in Hong Kong is important.	3.73	1.01	3.75	0.93	-0.29	.771	n.s.

*Note.* n.s. = not significant

To examine the potential gender differences in the value for the country's culture and history, a *t*-test was conducted, and the results were presented in Table 30. It was evident that both boys and girls in secondary schools shared a comparable level of value concerning the importance of learning Chinese culture ( $M_{male} = 3.58$ ,  $M_{female} = 3.66$ ) and history ( $M_{male} = 3.52$ ,  $M_{female} = 3.57$ ).

Table 30

Gender Differences in Students' Value of Country's Culture, History, and Languages

Scale	Male		Female		t-test		Result of comparison
	M	SD	M	SD	t	p	
Studying Chinese culture is important.	3.58	1.07	3.66	0.99	-1.42	.157	n.s.
Studying Chinese history is important.	3.52	1.07	3.57	0.94	.0.90	.371	n.s.

The results of a t-test comparing the difference in the value for the world's civilization and history between boys and girls were summarized in Table 31. It was found that both boys and girls agreed with the importance of studying global civilization ( $M_{male} = 3.84$ ,  $M_{female} = 3.84$ ) and history ( $M_{male} = 3.67$ ,  $M_{female} = 3.66$ ), with no statistically significant difference. Furthermore, there were also no significant differences between the two groups of students in recognizing the importance of using English and multiple languages in the current world. However, there was a statistically significant difference between the two groups in terms of the importance they placed on using Chinese (p = .023). Specifically, girls tended to consider the use of the Chinese language more important than boys.

Table 31

Gender Differences in Students' Value of World's Civilization, History, and Languages

Scale	Male		Female		t-test		Result of comparison
	M	SD	M	SD	t	p	
Studying global civilization is important.	3.84	0.95	3.84	0.88	-0.13	.897	n.s.
Studying the world's history is important.	3.67	1.03	3.66	0.92	0.18	.854	n.s.
Using Chinese in the current world is important.	3.61	0.98	3.73	0.89	-2.28	.023	Female > Male
Using English in the current world is important.	3.87	1.09	3.92	0.99	-0.81	.418	n.s.
Using multiple languages in the current world is important.	3.86	0.95	3.87	0.89	-0.07	.944	n.s.

*Note.* n.s. = not significant

**Emotions.** Table 32 summarized the results of a *t*-test that aimed to explore whether there were any gender differences in the overall empathy and sympathy of secondary school students. It

was noteworthy that female secondary school students tended to exhibit significantly higher levels of cognitive empathy ( $M_{male} = 3.32$ ,  $M_{female} = 3.53$ ; t = -4.38; p < .001), affective empathy ( $M_{male} = 2.81$ ,  $M_{female} = 3.08$ ; t = -5.53; p < .001), and sympathy ( $M_{male} = 3.30$ ,  $M_{female} = 3.53$ ; t = -4.64; p < .001) compared to male students.

Table 32

Gender Differences in Students' Empathy and Sympathy

Scale	Ma	Male		Female		est	Result of comparison
	M	SD	M	SD	t	p	
Cognitive empathy	3.32	0.82	3.53	0.82	-4.38	<.001	Female > Male
Affective empathy	2.81	0.84	3.08	0.88	-5.53	<.001	Female > Male
Sympathy	3.30	0.85	3.53	0.87	-4.64	<.001	Female > Male

*Note.* n.s. = not significant

Table 33 presented the results of a *t*-test conducted to investigate whether there were gender differences in secondary school students' emotional experiences at school. The emotional states of enjoyment, anger, and anxiety among secondary school students did not differ significantly between the two genders. Both male and female students experienced high levels of enjoyment ( $M_{male} = 3.64$ ,  $M_{female} = 3.65$ ), and relatively low levels of anxiety ( $M_{male} = 2.39$ ,  $M_{female} = 2.45$ ), and even lower levels of anger ( $M_{male} = 1.98$ ,  $M_{female} = 1.89$ ).

**Table 33**Gender Differences in Students' Emotions in Class

Scale	Male		Female		t-test		Result of comparison
	M	SD	M	SD	t	p	
Enjoyment	3.64	0.82	3.65	0.77	-0.29	.776	n.s.
Anger	1.98	0.81	1.89	0.79	1.95	.052	n.s.
Anxiety	2.39	0.82	2.45	0.84	1-16	.248	n.s.

*Note.* n.s. = not significant

**Motivations.** The results of a *t*-test comparing the difference in the academic effort and procrastination between boys and girls were summarized in Table 34. There was no significant

difference in their overall academic effort between boys and girls, and both tended to agree with their investment of academic effort ( $M_{male} = 3.35$ ,  $M_{female} = 3.42$ ). Additionally, male students reported a stronger tendency towards procrastination compared to female students ( $M_{male} = 3.21$ ,  $M_{female} = 3.04$ ; p < .001).

 Table 34

 Gender Differences in Students' Academic Effort and Procrastination

Scale	M	ile Female		t-test		Result of comparison	
	M	SD	M	SD	t	p	
Effort	3.35	0.73	3.42	0.74	-1.58	.114	n.s.
Procrastination	3.21	0.90	3.04	0.90	3.35	<.001	Male > Female

*Note.* n.s. = not significant

Table 35 presented the results of a *t*-test conducted to explore whether there were any gender differences in the political interest of secondary school students. There was a gender difference in the political interest of secondary school students (p < .001), with male students displaying a higher level of interest in political matters ( $M_{male} = 3.30$ ) compared to female students ( $M_{female} = 3.09$ ).

**Table 35**Gender Differences in Students' Political Interest

Scale	Ma	ale	Fen	Female		est	Result of comparison
	M	SD	M	SD	t	p	
Overall	3.30	0.84	3.09	0.69	4.76	<.001	Male > Female

*Note.* n.s. = not significant

Environmental Quality. Table 36 presented the results of a t-test that investigated gender differences in the perceived safety, respect, and diversity of secondary school students across four levels, including school, city, country, and world. In terms of perceived safety, boys reported greater perceived school safety compared to females ( $M_{male} = 3.66$ ,  $M_{female} = 3.56$ ; t = 1.96; p

= .05). However, the perception of security levels across the other contexts, including the city, country, and world, did not exhibit significant gender differences.

As for perceived respect, both male and female students reported comparable levels of perceived respect across four levels, with no statistically significant differences. Remarkably, males felt the strongest respect in Hong Kong ( $M_{male} = 3.72$ ), while females perceived the highest level of respect at school ( $M_{female} = 3.70$ ). Regarding perceived diversity, there were no significant gender differences across four levels, and both male and female students perceived some degree of diversity across all four levels.

**Table 36**Gender Differences in Students' Perceived Safety, Respect, and Diversity

Scale	M	ale	Fen	nale	t-to	est	Result of comparison
	M	SD	M	SD	t	p	
Safety							
My school is a safe place.	3.64	0.93	3.54	0.88	1.96	.050	Male > Female
Hong Kong is a safe place.	3.66	0.97	3.56	0.85	1.87	.062	n.s.
China is a safe place.	3.59	1.15	3.53	1.01	0.93	.352	n.s.
The world is a safe place.	3.24	1.14	3.20	0.98	0.67	.502	n.s.
Respect	•						
I feel respected in my school.	3.69	0.91	3.70	0.80	-0.25	.800	n.s.
I feel respected in Hong Kong.	3.72	0.89	3.66	0.79	1.30	.194	n.s.
I feel respected in China.	3.58	1.07	3.58	0.95	-0.09	.932	n.s.
I feel respected in the world.	3.60	0.91	3.63	0.77	-0.65	.516	n.s.
Diversity	•						
My school is full of diversity.	3.74	0.93	3.74	0.88	0.05	.962	n.s.
Hong Kong is full of diversity.	3.83	0.88	3.79	0.78	0.85	.398	n.s.
China is full of diversity.	3.69	1.09	3.70	1.00	-0.02	.982	n.s.
The world is full of diversity.	3.99	0.87	3.96	0.84	1.12	.262	n.s.

*Note.* n.s. = not significant

To examine the potential gender differences in the time spent on the media platforms among secondary school students, a t-test was conducted, and the results were shown in Table 37. There were no significant gender differences in the time spent on Hong Kong and international news platforms ( $M_{male} = 1.88$ ,  $M_{female} = 1.81$ ) and international social media ( $M_{male} = 2.02$ ,  $M_{female} = 2.35$ ). However, there was a significant gender difference in the time spent on Chinese news platforms and social media ( $M_{male} = 2.02$ ,  $M_{female} = 2.35$ ), with female students spending more time on these platforms than male students (t = -5.22; p < .001).

**Table 37**Gender Differences in Students' Consumption of News through Different Platforms

Scale	Male		Female		<i>t</i> -t	est	Result of comparison
	M	SD	M	SD	t	p	
Hong Kong and international new platforms	1.88	0.76	1.81	0.68	1.20	.229	n.s.
Chinese news platforms and social media	2.02	1.02	2.35	1.08	-5.22	<.001	Female > Male
International social media	2.79	0.97	2.73	0.82	1.08	.282	n.s.

*Note.* n.s. = not significant

Activities. Table 38 presented the results of a t-test that was conducted to explore whether there was any gender difference in the five levels of activities (i.e., school, community, city, country, and world) in which secondary school students participated. There were no significant gender differences in boy's and girls' participation in school activities ( $M_{male} = 2.87$ ,  $M_{female} = 2.95$ ), national activities ( $M_{male} = 2.07$ ,  $M_{female} = 2.14$ ), and international activities ( $M_{male} = 2.01$ ,  $M_{female} = 2.05$ ). However, there were gender differences in the frequency of participation in community activities ( $M_{male} = 2.62$ ,  $M_{female} = 2.73$ ; t = -2.15; p = .032) and activities held in Hong Kong ( $M_{male} = 1.95$ ,  $M_{female} = 2.08$ ; t = -2.66; p = .008), with female students participating more frequently in these activities than male students.

 Table 38

 Gender Differences in Students' Participation in Activities

Scale	Male		Female		t-te	est	Result of comparison
	M	SD	M	SD	t	p	
School	2.87	0.94	2.95	0.85	-1.59	.112	n.s.
Community	2.62	0.95	2.73	0.92	-2.15	.032	Female > Male
City	1.95	0.84	2.08	0.78	-2.66	.008	Female > Male
Country	2.07	0.92	2.14	0.85	-1.19	.233	n.s.
World	2.01	0.76	2.05	0.73	-0.87	.384	n.s.

The gender differences in students' willingness to participate in social curriculum and cocurriculum activities were summarized in Table 38. The data revealed that female students were more willing to join social curriculum and co-curriculum activities than male students at the city (t = -2.53; p = .011), country (t = -3.69; p < .001), and world (t = -3.46; p < .001) levels.

**Table 39**Gender Differences in Students' Willingness to Participate in Social Curriculum and Cocurriculum Activities

Scale	M	Male		Female		est	Result of comparison
	M	SD	M	SD	t	p	
City	2.96	1.01	3.11	0.96	-2.53	.011	Female > Male
Country	2.77	1.14	3.02	1.13	-3.69	<.001	Female > Male
World	2.80	1.15	3.03	1.09	-3.46	<.001	Female > Male

*Note.* n.s. = not significant

**Social Interactions.** Table 40 showed the results of a *t*-test that was conducted to explore whether there were any gender differences in the six dimensions of social interactions (i.e., interactions with peers, teachers, parents, people in Hong Kong, people in Mainland China, and people in other countries). Notably, there were no significant gender differences in any of the six dimensions of social interactions. Male and female students both tended to perceive the strongest social interaction with their parents ( $M_{male} = 3.28$ ,  $M_{female} = 3.24$ ) while having the least social interaction with individuals from other countries ( $M_{male} = 2.40$ ,  $M_{female} = 2.30$ ).

Table 40

Gender Differences in Students' Social Interactions

Scale	M	Male		Female		est	Result of comparison
	M	SD	M	SD	t	p	
Peers	3.09	0.91	3.18	0.86	-1.61	.108	n.s.
Teachers	3.21	0.87	3.18	0.82	0.55	.586	n.s.
Parents	3.28	0.96	3.24	0.96	0.76	.449	n.s.
City	3.22	0.91	3.19	0.80	0.53	.597	n.s.
Country	2.89	1.30	2.84	1.32	0.60	.547	n.s.
World	2.40	1.17	2.30	1.10	1.49	.136	n.s.

# Birthplace Differences

Senses of Belonging. Table 41 summarized the t-test results comparing the sense of belonging of students born in Hong Kong versus mainland China across four levels (i.e., school belonging, city belonging, country belonging, and world belonging). Students who were born in Hong Kong tended to have a stronger sense of city belonging ( $M_{HK} = 3.93$ ), followed by school belonging ( $M_{HK} = 3.74$ ), world belonging ( $M_{HK} = 3.64$ ), and country belonging ( $M_{HK} = 3.59$ ). In contracts, students born in Mainland China had the strongest sense of country belonging ( $M_{HK} = 4.18$ ). Specifically, students born in Hong Kong had a stronger city belonging (t = 2.79; t = 0.006) but a lower country belonging (t = -8.69; t = 0.001) compared to the students born in Mainland China.

**Table 41**Birthplace Differences in Students' Senses of Belonging

Scale	Hong	Kong	Mainland China		t-t	est	Result of comparison
	M	SD	M	SD	t	p	
School belonging	3.74	0.79	3.78	0.69	-0.63	.528	n.s.
City belonging	3.93	0.78	3.78	0.63	2.79	.006	Hong Kong > Mainland China
National belonging	3.59	1.06	4.18	0.75	-8.69	<.001	Mainland China >

							Hong Kong
World belonging	3.64	0.82	3.78	0.71	-1.96	.051	n.s.

Senses of Identity. Table 42 provided a summary of the t-test results comparing the sense of identity of secondary school students born in Hong Kong and Mainland China. In general, both groups of students had strong school identity ( $M_{HK} = 3.50$ ,  $M_{MLC} = 3.48$ ) and global identity ( $M_{HK} = 3.60$ ,  $M_{MLC} = 3.73$ ). This finding indicated that birthplace did not play a significant role in students' sense of school or global identity. Significant differences appeared in their agreement on city and national identity. Students born in Hong Kong had a significantly stronger sense of city identity ( $M_{HK} = 3.85$ ) compared to students born in Mainland China ( $M_{MLC} = 3.40$ ; t = 6.60; p < .001). In contrast, students born in Mainland China had a stronger national identity ( $M_{MLC} = 3.96$ ; t = -6.22; p < .001).

**Table 42**Birthplace Differences in Students' Sense of Identity

Scale	Hong Kong		Mainland China		<i>t</i> -test		Result of comparison
	M	SD	M	SD	t	p	
The term [school name]'s student describes me well.	3.50	0.96	3.48	0.89	0.20	.840	n.s.
The term Hongkonger describes me well.	3.85	0.96	3.40	0.78	6.60	<.001	Hong Kong > Mainland China
The term Chinese describes me well.	3.43	1.11	3.96	0.98	-6.22	<.001	Mainland China > Hong Kong
The term global citizen describes me well.	3.60	0.93	3.73	0.90	-1.70	.090	n.s.

*Note.* n.s. = not significant

**Personal Characteristics.** Table 43 presented a summary of the *t*-test results comparing the positive and negative affect of students born in Hong Kong and Mainland China. The results suggested that these two groups of students did not differ significantly concerning their positive and negative affect.

**Table 43**Birthplace Differences in Students' Positive and Negative Affect Schedules

Scale	Hong	Kong Mainland China		t-test		Result of comparison	
	M	SD	M	SD	t	p	
Positive affect	2.84	0.79	2.85	0.83	-0.04	.969	n.s.
Negative affect	2.48	0.90	2.46	0.92	0.28	.781	n.s.

The results of the *t*-test comparing the personality of students born in Hong Kong and Mainland China were shown in Table 44. There was no significant difference in their personality of extraversion ( $M_{HK} = 2.97$ ,  $M_{MLC} = 2.95$ ), agreeableness ( $M_{HK} = 3.50$ ,  $M_{MLC} = 3.55$ ), conscientiousness ( $M_{HK} = 3.08$ ,  $M_{MLC} = 3.13$ ), neuroticism ( $M_{HK} = 3.06$ ,  $M_{MLC} = 3.14$ ), or openness ( $M_{HK} = 3.68$ ,  $M_{MLC} = 3.68$ ).

**Table 44**Birthplace Differences in Students' Personalities

Scale	Hong	Hong Kong		Mainland China		est	Result of comparison
	M	SD	M	SD	t	p	
Extraversion	2.97	0.84	2.95	0.82	0.30	.768	n.s.
Agreeableness	3.50	0.70	3.55	0.66	-0.77	.441	n.s.
Conscientiousness	3.08	0.77	3.13	0.75	-0.77	.440	n.s.
Neuroticism	2.94	0.75	2.86	0.78	1.29	.197	n.s.
Openness	3.68	0.71	3.63	0.64	0.77	.441	n.s.

*Note.* n.s. = not significant

**Value.** The results (see Table 45) indicated that there was no significant difference concerning students' values for their school culture and history. Both groups of students ranked using Cantonese ( $M_{HK} = 4.06$ ,  $M_{MLC} = 3.97$ ) as the most important language and English ( $M_{HK} = 3.56$ ,  $M_{MLC} = 3.51$ ) as the second-most important language in their schools. Students born in Mainland China considered it more important to use Mandarin at school than students born in Hong Kong (t = -5.12; p < .001).

**Table 45**Birthplace Differences in Students' Values of School's Culture, History, and Languages

Scale	Hong Kong		Mainland China		<i>t</i> -test		Result of comparison
	M	SD	M	SD	t	p	
Studying my school's culture is important.	3.53	0.89	3.58	0.79	-0.73	.464	n.s.
Studying my school's history is important.	3.35	0.99	3.41	0.90	-0.79	.428	n.s.
Using Cantonese in school is important.	4.06	0.92	3.97	0.78	1.41	.160	n.s.
Using Mandarin in school is important.	2.89	1.11	3.36	0.89	-5.12	<.001	Mainland China > Hong Kong
Using English in school is important.	3.56	1.01	3.51	0.95	0.63	.532	n.s.

Table 46 presented a summary of the *t*-test results comparing their values for the city's culture, history, and language, between students born in Hong Kong and Mainland China. The results indicated that there was no significant difference in the levels of importance these two groups of students placed on Hong Kong culture and history.

Concerning the values for the languages, students from both places considered using Cantonese as the most important language in Hong Kong ( $M_{HK} = 4.17$ ,  $M_{MLC} = 3.98$ ), followed by using English ( $M_{HK} = 3.74$ ,  $M_{MCL} = 3.80$ ) and Mandarin ( $M_{HK} = 2.95$ ,  $M_{MCL} = 3.32$ ). However, students born in Hong Kong tended to report significantly higher levels of importance in using Cantonese compared to those born in Mainland China (t = 2.53; p = .012), while students from Mainland China reported significantly higher levels of importance in using Mandarin compared to their counterparts born in Hong Kong (t = -4.25; p < .001).

 Table 46

 Birthplace Differences in Students' Values of City's Culture, History, and Languages

Scale	Hong Kong		Mainland China		t-test		Result of comparison
	M	SD	M SD t p				

Studying Hong Kong culture is important.	3.81	0.90	3.73	0.93	1.06	.289	n.s.
Studying Hong Kong's history is important.	3.70	0.97	3.72	0.82	-0.34	.733	n.s.
Using Cantonese in Hong Kong is important.	4.17	0.87	3.98	0.90	2.53	.012	Hong Kong > Mainland China
Using Mandarin in Hong Kong is important.	2.95	1.05	3.32	0.90	-4.25	<.001	Mainland China > Hong Kong
Using English in Hong Kong is important.	3.74	0.98	3.80	0.90	-0.71	.480	n.s.

Table 47 showed a summary of the *t*-test results comparing students born in Hong Kong and Mainland China concerning their values for the country's culture, history, and languages. Students born in Mainland China placed a higher value on studying Chinese culture and history than students born in Hong Kong (studying Chinese culture:  $M_{HK} = 3.56$ ,  $M_{MLC} = 4.03$ ; t = -6.17; p < .001; history:  $M_{HK} = 3.49$ ,  $M_{MLC} = 3.86$ ; t = -4.62; p < .001).

**Table 47**Birthplace Differences in Students' Values of Country's Culture, History, and Languages

Scale	Hong Kong		Mainland China		<i>t-</i> t	est	Result of comparison
	M	SD	M	SD	t	p	
Studying Chinese culture is important.	3.56	1.05	4.03	0.89	-6.17	<.001	Mainland China > Hong Kong
Studying Chinese history is important.	3.49	1.01	3.86	0.95	-4.62	<.001	Mainland China > Hong Kong

*Note.* n.s. = not significant

Table 48 summarized the *t*-test results comparing students born in Hong Kong and Mainland China concerning their values for the world's culture and history. No significant difference was found. Regarding the importance of using different languages in the current world, students born in Mainland China ( $M_{MLC} = 3.85$ ) reported higher levels of values for using Chinese compared to students born in Hong Kong ( $M_{HK} = 3.63$ ; t = -2.72; p = .007). No other difference was found.

 Table 48

 Birthplace Differences in Students' Values of World's Civilization, History, and Languages

Scale	Hong Kong		Mainland China		t-test		Result of comparison
	M	SD	M	SD	t	p	
Studying global civilization is important.	3.82	0.93	3.93	0.87	-1.38	.169	n.s.
Studying the world's history is important.	3.64	1.00	3.76	0.86	-1.62	.107	n.s.
Using Chinese in the current world is important.	3.63	0.94	3.85	0.92	-2.72	.007	Mainland China > Hong Kong
Using English in the current world is important.	3.91	1.04	3.85	1.02	0.68	.494	n.s.
Using multiple languages in the current world is important.	3.87	0.92	3.87	0.95	-0.04	.972	n.s.

**Emotions.** Table 49 provided a summary of the *t*-test results comparing the empathy and sympathy of secondary school students born in Hong Kong and Mainland China. The results indicated that students in two birthplaces shared similar levels of overall cognitive empathy ( $M_{HK} = 3.42$ ,  $M_{MLC} = 3.45$ ), affective empathy ( $M_{HK} = 2.96$ ,  $M_{MLC} = 2.90$ ), and sympathy ( $M_{HK} = 3.42$ ,  $M_{MLC} = 3.40$ ), with no statistically significant differences between the two groups.

**Table 49**Birthplace Differences in Students' Empathy and Sympathy

Scale	Hong	Hong Kong		Mainland China		est	Result of comparison
	M	SD	M	SD	t	p	
Cognitive empathy	3.42	0.82	3.45	0.84	-0.40	.689	n.s.
Affective empathy	2.96	0.87	2.90	0.87	0.79	.430	n.s.
Sympathy	3.42	0.87	3.40	0.84	0.23	.817	n.s.

*Note.* n.s. = not significant

Table 50 presented a summary of the *t*-test results comparing the classroom emotional experiences (i.e., enjoyment, anger, and anxiety) of secondary school students born in Hong Kong and Mainland China. There was no significant difference in their enjoyment ( $M_{HK} = 3.64$ ,  $M_{MLC} =$ 

3.69) and anxiety ( $M_{HK} = 2.43$ ,  $M_{MLC} = 2.36$ ). However, students burn in Hong Kong reported experiencing more anger in the classroom as compared to those who were born in Mainland China ( $M_{HK} = 1.96$ ,  $M_{MLC} = 1.82$ ; t = 2.14; p = .034).

**Table 50**Birthplace Differences in Students' Emotions in Class

Scale	Hong	Hong Kong		Mainland China		est	Result of comparison
	M	SD	M	SD	t	p	
Enjoyment	3.64	0.79	3.69	0.78	-0.74	.458	n.s.
Anger	1.96	0.82	1.82	0.71	2.14	.034	Hong Kong > Mainland China
Anxiety	2.43	0.83	2.36	0.85	1.06	.290	n.s.

**Motivation.** In Table 51, a summary was presented of *t*-test results comparing the academic effort and procrastination tendencies of secondary school students who were born in Hong Kong and Mainland China. There was no significant difference found.

 Table 51

 Birthplace Differences in Students' Academic Effort and Procrastination

Scale	Hong	Hong Kong		Mainland China		est	Result of comparison
	M	SD	M	SD	t	p	
Effort	3.39	0.74	3.33	0.66	0.95	.341	n.s.
Procrastination	3.14	0.90	3.07	0.90	0.85	.396	n.s.

*Note.* n.s. = not significant

Table 52 presented a summary of the *t*-test results comparing the political interest of secondary school students born in Hong Kong and Mainland China. The result indicated that there was no significant difference in their political interest ( $M_{HK} = 3.20$ ,  $M_{MLC} = 3.23$ ).

**Table 52**Birthplace Differences in Students' Political Interest

Scale	Hong Kong	Mainland China	t-test	Result of comparison
				milbon

	M	SD	M	SD	t	p	
Political Interest	3.20	0.79	3.23	0.77	-0.48	.631	n.s.

Environmental Quality. Table 53 summarized the t-test results comparing students born in Hong Kong and Mainland China concerning their perceived safety, respect, and diversity across four levels (i.e., school, city, country, and world. There was no significant difference in their perceived safety in the school ( $M_{HK} = 3.59$ ,  $M_{MLC} = 3.68$ ), Hong Kong ( $M_{HK} = 3.59$ ,  $M_{MLC} = 3.69$ ), and the world ( $M_{HK} = 3.22$ ,  $M_{MLC} = 3.28$ ). However, students born in Mainland China reported greater perceived safety in China ( $M_{MLC} = 3.98$ ) than those who were born in Hong Kong ( $M_{HK} = 3.49$ ; t = -6.08; p < .001).

Concerning perceived respect, students born in Mainland China felt more respected in China than those born in Hong Kong. Concerning perceived diversity, students born in Mainland China reported greater diversity in China ( $M_{HK} = 3.63$ ,  $M_{MLC} = 4.03$ ) and the world ( $M_{HK} = 3.94$ ,  $M_{MLC} = 4.11$ ) than those born in Hong Kong.

**Table 53**Birthplace Differences in Students' Perceived Safety, Respect, and Diversity

Scale	Hong Kong		Mainland China		<i>t</i> -test		Result of comparison
	M	SD	M	SD	t	p	
Safety							
My school is a safe place.	3.59	0.91	3.68	0.90	-1.18	.239	n.s.
Hong Kong is a safe place.	3.59	0.92	3.69	0.88	-1.29	.199	n.s.
China is a safe place.	3.49	1.10	3.98	0.93	-6.08	<.001	Mainland China > Hong Kong
The world is a safe place.	3.22	1.07	3.28	1.03	-0.74	.458	n.s.
Respect							
I feel respected in my school.	3.68	0.87	3.77	0.79	-1.23	.222	n.s.
I feel respected in Hong Kong.	3.70	0.85	3.65	0.82	0.71	.480	n.s.

I feel respected in China.	3.52	1.03	3.96	0.90	-5.69	<.001	Mainland China > Hong Kong
I feel respected in the world.	3.62	0.85	3.64	0.80	-0.26	.794	n.s.
Diversity							
My school is full of diversity.	3.73	0.81	3.79	0.86	-0.84	.403	n.s.
Hong Kong is full of diversity.	3.79	0.84	3.91	0.77	-1.81	.072	n.s.
China is full of diversity.	3.63	1.06	4.03	0.95	-4.77	<.001	Mainland China > Hong Kong
The world is full of diversity.	3.94	0.86	4.11	0.80	-2.48	.014	Mainland China > Hong Kong

Table 54 provided a summary of the *t*-test results comparing the media time spent by students born in Hong Kong and Mainland China. Students whose birthplace was Mainland China report using Chinese news platforms and social media more frequently ( $M_{MLC} = 2.75$ ) compared to students born in Hong Kong ( $M_{HK} = 2.09$ ). Moreover, students born in Hong Kong reported a higher preference for international social media ( $M_{HK} = 2.80$ ) compared to students born in Mainland China ( $M_{MLC} = 2.55$ ).

 Table 54

 Birthplace Differences in Students' Consumption of News through Different Platforms

Scale	Hong Kong		Mainland China		<i>t</i> -test		Result of comparison
	M	SD	M	SD	t	p	
Hong Kong and international news platforms (overall)	1.85	0.72	1.86	0.76	-0.15	.880	n.s.
Chinese news platforms and social media (overall)	2.09	1.05	2.75	1.02	-6.98	<.001	Mainland China > Hong Kong
International social media (overall)	2.80	0.90	2.55	0.90	3.05	.002	Hong Kong > Mainland China

*Note.* n.s. = not significant

Activities. Table 55 showed a summary of the *t*-test results comparing students born in Hong Kong and Mainland China concerning their participation in activities of across five levels (i.e., school, community, city, country, and world). Students born in Hong Kong took part in community activities ( $M_{HK} = 2.71$ ,  $M_{MLC} = 2.48$ ) and international activities ( $M_{HK} = 2.08$ ,  $M_{MLC} = 1.78$ ) more frequently than those born in Mainland China. Moreover, students born in Mainland China ( $M_{MLC} = 2.37$ ) were more likely to participate in activities in Mainland than students born in Hong Kong ( $M_{HK} = 2.07$ ; t = -4.03; p < .001).

 Table 55

 Birthplace Differences in Students' Participation in Activities

Scale	Hong	Hong Kong		Mainland China		est	Result of comparison
	M	SD	M	SD	t	p	
School	2.92	0.90	2.84	0.89	1.10	.273	n.s.
Community	2.71	0.95	2.48	0.87	2.86	.004	Hong Kong > Mainland China
City	2.03	0.81	1.93	0.83	1.37	.172	n.s.
Country	2.07	0.88	2.37	0.92	-4.03	<.001	Mainland China > Hong Kong
World	2.08	0.75	1.78	0.69	4.65	<.001	Hong Kong > Mainland China

*Note.* n.s. = not significant

Table 56 summarized the differences between students born in Hong Kong and Mainland China concerning their willingness to participate in social curriculum and co-curriculum activities. Students born in Hong Kong showed the strongest willingness to join local activities and least willingness to join activities at the country level. In contrast, students born in Mainland China had the strongest willingness to participate in country-level activities, followed by city- and world-level activities.

Table 56

Birthplace Differences in Students' Willingness to Participate in Social Curriculum and Cocurriculum Activities

Scale	Hong	Kong	Mainland China		<i>t</i> -t	est	Result of comparison
	M	SD	M	SD	t	p	
City	3.04	1.00	2.99	0.93	0.54	.587	n.s.
Country	2.85	1.14	3.18	1.09	-3.30	<.001	Mainland China > Hong Kong
World	2.90	1.14	2.95	1.08	-0.53	.596	n.s.

**Social Interactions.** Table 57 presented a summary of the *t*-test results comparing the social interactions of secondary school students born in Hong Kong and Mainland China across six dimensions (i.e., peers, teachers, parents, city, country, and world). Not surprisingly, students born in Mainland China reported having more interactions with people in Mainland China ( $M_{MLC} = 3.68$ ) compared to those born in Hong Kong ( $M_{HK} = 2.74$ ).

**Table 57**Birthplace Differences in Students' Social Interactions

Scale	Hong	Hong Kong		nland ina	t-t	est	Result of comparison
	M	SD	M	SD	t	p	
Peers	3.14	0.90	3.09	0.85	0.72	.471	n.s.
Teachers	3.19	0.86	3.20	0.80	-0.13	.896	n.s.
Parents	3.28	0.96	3.14	0.93	1.69	.091	n.s.
City	3.21	0.87	3.14	0.82	0.85	.394	n.s.
Country	2.74	1.30	3.68	1.03	-10.28	<.001	Mainland China > Hong Kong
World	2.78	1.14	2.22	1.11	1.68	.094	n.s.

*Note.* n.s. = not significant

## Ethnic Differences

**Senses of Belonging.** The results of the *t*-test comparing the ethnic differences in students' senses of belonging across four levels (i.e., school, city, country, and world) were presented in

Table 58. Chinese students had a stronger sense of national belonging ( $M_{CN} = 3.68$ ,  $M_{NC} = 3.12$ ) than non-Chinese students (t = 2.65, p = .008).

Table 58

Ethnic Differences in Students' Senses of Belonging

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
School belonging	3.74	0.78	3.60	0.62	0.88	.381	n.s.
City belonging	3.92	0.76	3.80	0.71	0.76	.448	n.s.
Country belonging	3.68	1.04	3.12	0.83	2.65	.008	Chinese > non- Chinese
World belonging	3.66	0.80	3.68	0.77	-0.14	.886	n.s.

Senses of Identity. Table 59 presented the results of a t-test comparing between Chinese and non-Chinese students concerning their senses of identity across four levels (i.e., school, city, country, and world). Not surprisingly, Chinese students exhibited a stronger sense of national identity in comparison to non-Chinese students ( $M_{CN} = 3.51$ ,  $M_{NC} = 3.00$ ; t = 2.88, p = .008).

 Table 59

 Ethnic Differences in Students' Senses of Identity

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
The term [school name]'s student describes me well.	3.49	0.95	3.32	0.90	0.90	.370	n.s.
The term Hongkonger describes me well.	3.79	0.95	3.60	0.76	1.00	.320	n.s.
The term Chinese describes me well.	3.51	1.12	3.00	0.87	2.88	.008	Chinese > non- Chinese
The term global citizen describes me well.	3.61	0.92	3.36	1.04	1.36	.174	n.s.

*Note.* n.s. = not significant

**Personal Characteristics.** The results of *t*-test comparing between Chinese and non-Chinese students concerning their positive and negative affect are presented in Table 60. There was no ethnic difference in this construct across two groups of students.

 Table 60

 Ethnic Differences in Students' Positive and Negative Affect Schedules

Scale	Chi	nese	e Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
Positive affect	2.85	0.80	2.62	0.78	1.43	.154	n.s.
Negative affect	2.48	0.90	2.27	0.81	1.15	.251	n.s.

Table 61 presents the results of a t-test that was conducted to investigate Chinese and non-Chinese students' personality differences. Chinese students tended to exhibit significantly greater openness to change compared to non-Chinese students ( $M_{CN} = 3.68$ ,  $M_{NC} = 3.25$ ; t = 2.99, p < .003). They did not differ in the other dimension of personality.

 Table 61

 Ethnic Differences in Students' Personality

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
Extraversion	2.97	0.84	3.02	0.86	-0.27	.787	n.s.
Agreeableness	3.50	0.69	3.56	0.78	-0.42	.676	n.s.
Conscientiousness	3.08	0.76	3.20	0.83	-0.77	.442	n.s.
Neuroticism	3.07	0.76	3.18	0.76	-0.75	.453	n.s.
Openness	3.68	0.70	3.25	0.66	2.99	.003	Chinese > non- Chinese

*Note.* n.s. = not significant

Value. The comparison between Chinese and non-Chinese students' values towards the school's culture, history, and language was demonstrated in Table 62. No significant difference was observed.

Table 62

Ethnic Differences in Students' Value

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	

Studying my school's culture is important.	3.53	0.87	3.40	1.12	0.73	.463	n.s.
Studying my school's history is important.	3.35	0.97	3.48	1.30	-0.52	.610	n.s.
Using Cantonese in school is important.	4.05	0.91	4.08	0.76	-0.18	.857	n.s.
Using Mandarin in school is important.	2.94	1.10	3.08	0.95	-0.61	.540	n.s.
Using English in school is important.	3.55	1.00	3.63	1.10	-0.38	.701	n.s.

Table 63 summarized the comparisons between Chinese and non-Chinese students' value towards the Hong Kong's culture, history and, languages used. No significant difference was observed.

 Table 63

 Ethnic Differences in Students' Value of City's Culture, History, and Languages

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
Studying Hong Kong culture is important.	3.79	0.88	3.60	1.12	0.87	.395	n.s.
Studying Hong Kong's history is important.	3.70	0.94	3.52	1.09	0.94	.347	n.s.
Using Cantonese in Hong Kong is important.	4.15	0.87	3.92	0.91	1.27	.203	n.s.
Using Mandarin in Hong Kong is important.	2.99	1.03	3.20	0.96	-1.02	.311	n.s.
Using English in Hong Kong is important.	3.74	0.97	3.68	1.11	0.32	.747	n.s.

*Note.* n.s. = not significant

Table 64 presented the differences between Chinese and non-Chinese students' values towards the country's culture and history. No significant difference was observed.

 Table 64

 Ethnic Differences in Students' Value of Country's Culture, History, and Languages

Scale	Chi	nese	se Non-Chinese		<i>t</i> -t	Result of comparison	
	M	SD	M	SD	t	p	

Studying Chinese culture is important.	3.62	1.04	3.60	0.96	0.07	0.94	n.s.
Studying Chinese history is important.	3.54	1.01	3.48	0.96	0.28	.779	n.s.

Table 65 presented the differences between Chinese and non-Chinese students' values towards global civilization, history, and languages used in the world. No significant difference was observed. Notably, both Chinese and non-Chinese students strongly acknowledged the importance of using English in the current world.

 Table 65

 Ethnic Differences in Students' Value of World's Civilization, History, and Languages

Scale	Chi	nese	Non-Chinese		<i>t</i> -test		Result of comparison
	M	SD	M	SD	t	p	
Studying global civilization is important.	3.84	0.91	3.52	1.05	1.74	.082	n.s.
Studying the world's history is important.	3.66	0.98	3.44	1.23	1.13	.260	n.s.
Using Chinese in the current world is important.	3.66	0.94	3.50	0.93	0.83	.405	n.s.
Using English in the current world is important.	3.90	1.04	3.84	1.03	0.26	.793	n.s.
Using multiple languages in the current world is important.	3.87	0.92	3.56	1.04	1.65	.099	n.s.

*Note.* n.s. = not significant

**Emotions.** Table 66 summarized the results of a *t*-test that aimed to explore whether there was any ethnic difference in the cognitive empathy, affective empathy, and sympathy of our students. There was no significant difference observed.

 Table 66

 Ethnic Differences in Students' Empathy and Sympathy

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
Cognitive empathy	3.43	0.82	3.39	0.86	0.22	.829	n.s.
Affective empathy	2.95	0.86	2.83	1.14	0.52	.609	n.s.

Sympathy 3.41 0.85 3.30 1.17 0.49 .631 n.s.

*Note.* n.s. = not significant

Table 67 presented the results investigating ethnic differences of students' emotional experiences in the classroom. No significant difference was observed. Both Chinese and non-Chinese students tended to experience high enjoyment ( $M_{CN} = 3.65$ ,  $M_{NC} = 3.45$ ), low anger ( $M_{CN} = 1.94$ ,  $M_{NC} = 2.16$ ), and low anxiety ( $M_{CN} = 2.42$ ,  $M_{NC} = 2.52$ ).

Table 67

Ethnic Differences in Students' Emotions in Class

Scale	Chi	Chinese		Non-Chinese		est	Result of comparison
	M	SD	M	SD	t	p	
Enjoyment	3.65	0.79	3.45	0.91	1.19	.234	n.s.
Anger	1.94	0.81	2.16	0.72	-1.30	.194	n.s.
Anxiety	2.42	0.83	2.52	0.78	-0.57	.573	n.s.

*Note.* n.s. = not significant

**Motivation.** The results comparing between Chinese and non-Chinese students' academic effort and procrastination were summarized in Table 68. There was no significant difference observed. However, non-Chinese students reported a marginally higher level of procrastination than Chinese students ( $M_{CN} = 3.13$ ,  $M_{NC} = 3.46$ ; t = -1.78, p = .075).

 Table 68

 Ethnic Differences in Students' Academic Effort and Procrastination

Scale	Chi	ninese Non-Chinese		t-test		Result of comparison	
	M	SD	M	SD	t	p	
Effort	3.38	0.73	3.36	0.78	0.11	.914	n.s.
Procrastination	3.13	0.90	3.46	0.76	-1.78	.075	n.s.

*Note.* n.s. = not significant

Table 69 presented the results exploring ethnic differences in our students' political interest.

No significant difference was observed.

 Table 69

 Ethnic Differences in Students' Political Interest

Scale	Chi	nese	Non-Chinese		<i>t</i> -test		Result of comparison
	M	SD	M	SD	t	p	
Political Interest	3.20	0.78	3.22	0.72	-0.14	.891	n.s.

**Environmental Quality.** Table 70 presented the results investigating ethnic difference our students' perceived safety, respect, and diversity in the school, city, country, and the world.

Chinese students had a stronger tendency to believe that China is a safe place than non-Chinese students did ( $M_{CN} = 3.56$ ,  $M_{NC} = 3.08$ ; t = 2.48, p = .021). Moreover, Chinese students reported feeling more respected in Hong Kong ( $M_{CN} = 3.61$ ,  $M_{NC} = 3.54$ ; t = 2.36, p = .018) and Mainland China ( $M_{CN} = 3.61$ ,  $M_{NC} = 3.54$ ; t = 2.02, p = .044) than their non-Chinese counterparts. Finally, Chinese students reported a greater tendency to Hong Kong ( $M_{CN} = 3.81$ ,  $M_{NC} = 3.46$ ; t = 2.08, p = .038) and China ( $M_{CN} = 3.96$ ,  $M_{NC} = 3.67$ ; t = 2.17, p = .030) to be diverse places than non-Chinese students.

 Table 70

 Ethnic Differences in Students' Perceived Safety, Respect, and Diversity

Scale	Chi	nese	Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
Safety							
My school is a safe place.	3.60	0.91	3.42	1.02	0.97	.333	n.s.
Hong Kong is a safe place.	3.61	0.92	3.54	0.72	0.36	.718	n.s.
China is a safe place.	3.56	1.09	3.08	0.93	2.48	.021	Chinese > non- Chinese
The world is a safe place.	3.23	1.07	2.92	1.02	1.42	.155	n.s.
Respect							
I feel respected in my school.	3.70	0.86	3.54	0.78	0.87	.382	n.s.
I feel respected in Hong Kong.	3.70	0.84	3.29	0.96	2.36	.018	Chinese > non- Chinese

I feel respected in China.	3.59	1.01	3.17	1.01	2.02	.044	Chinese > non- Chinese
I feel respected in the world.	3.62	0.84	3.38	0.77	1.43	.154	n.s.
Diversity							
My school is full of diversity.	3.74	0.90	3.42	0.72	1.76	.079	n.s.
Hong Kong is full of diversity.	3.81	0.83	3.46	0.72	2.08	.038	Chinese > non- Chinese
China is full of diversity.	3.70	1.05	3.22	1.00	2.17	.030	Chinese > non- Chinese
The world is full of diversity.	3.96	0.85	3.67	0.87	1.70	.090	n.s.

Table 71 presented results examining the ethnic differences concerning the time spent on the media platforms. Chinese students tended to use Hong Kong and international news platforms ( $M_{CN}$  = 1.86,  $M_{NC}$  = 1.53; t = 1.97, p = .049), as well as Chinese news platforms and social media ( $M_{CN}$  = 2.18,  $M_{NC}$  = 1.58; t = 2.47, p = .014) more frequently than non-Chinese students.

**Table 71**Ethnic Differences in Students' Consumption of News

Scale	Chinese		Non-Chinese		t-test		Result of comparison
	M	SD	M	SD	t	p	
Hong Kong and international news platforms	1.86	0.73	1.53	0.60	1.97	.049	Chinese > non- Chinese
Chinese news platforms and social media	2.18	1.06	1.58	0.76	2.47	.014	Chinese > non- Chinese
International social media	2.77	0.90	2.39	0.71	1.78	.075	n.s.

*Note.* n.s. = not significant

Activities. Table 72 presented the results of exploring whether there was any ethnic difference students' participation in activities across five levels (i.e., school, community, city, country, and world). The only difference observed was that non-Chinese students appeared to participate in more international activities than their Chinese counterparts ( $M_{CN} = 2.03$ ,  $M_{NC} = 2.64$ ; t = -3.92, p < .001).

 Table 72

 Ethnic Differences in Students' Participation in Activities

Scale	Chi	Chinese		Non-Chinese		est	Result of comparison
	M	SD	M	SD	t	p	
School	2.91	0.90	2.86	0.55	0.41	.684	n.s.
Community	2.67	0.94	3.04	0.88	-1.95	.051	n.s.
City	2.02	0.81	1.97	0.78	0.26	.795	n.s.
Country	2.11	0.89	1.77	0.88	1.87	.062	n.s.
World	2.03	0.74	2.64	0.82	-3.92	<.001	Non-Chinese > Chinese

Curriculum and Co-curriculum Activities. Table 73 showed the results exploring ethnic difference concerning participation in social curriculum and co-curriculum activities. Chinese students reported participating in more social curriculum and co-curriculum activities held in Mainland China ( $M_{CN} = 2.90$ ,  $M_{NC} = 2.31$ ; t = 2.20, p = .028) and international activities ( $M_{CN} = 2.91$ ,  $M_{NC} = 2.32$ ; t = 2.29, p = .022) than non-Chinese students.

Table 73

Ethnic Differences in Students' Willingness to Participate in Social Curriculum and Co-curriculum Activities

Scale	Chi	Chinese		Non-Chinese		est	Result of comparison
	M	SD	M	SD	t	p	
City	3.03	0.99	2.63	1.05	1.76	.078	n.s.
Country	2.90	1.14	2.31	1.26	2.20	.028	Chinese > Non-Chinese
World	2.91	1.13	2.32	1.10	2.29	.022	Chinese > Non-Chinese

*Note.* n.s. = not significant

**Social Interactions.** Table 74 showed the results exploring ethnic differences concerning students' social interactions with their peers, teachers, parents, people in Hong Kong, in Mainland China, and from other countries. Non-Chinese students reported that they had more social

interactions with people from other countries than their Chinese counterparts reported ( $M_{CN} = 2.34$ ,  $M_{NC} = 2.94$ ; t = -2.55, p = .011).

**Table 74**Ethnic Differences in Students' Social Interactions

Scale	Chi	Chinese		Non-Chinese		est	Result of comparison
	M	SD	M	SD	t	p	
Peers	3.14	0.88	2.86	0.94	1.49	.136	n.s.
Teachers	3.19	0.84	3.25	1.07	-0.29	.775	n.s.
Parents	3.25	0.95	3.29	1.03	-0.19	.847	n.s.
City	3.20	0.86	3.10	0.83	0.59	.557	n.s.
Country	2.87	1.31	2.48	1.17	1.47	.143	n.s.
World	2.34	1.13	2.94	1.23	-2.55	.011	Non-Chinese > Chinese

*Note.* n.s. = not significant

# **Correlation Analyses**

Table 75 outlined the correlations between students' sense of belonging and sense of identity across four levels (i.e., school, city, country, and world). The results demonstrated significant associations between students' reports of their sense of belonging and identity at each of these levels (p < .01). Specifically, school belonging exhibited a significant and positive correlation with city belonging (r = .652, p < .01), world belonging (r = .692, p < .01), and school identity (r = .601, p < .01). Furthermore, students' reports of city belonging were significantly correlated with world belonging (r = .722, p < .01). Notably, students' sense of city identity exhibited a strong correlation with world identity (r = .644, p < .01). Overall, these findings suggested that students' senses of belonging and identity were interrelated across various levels.

Table 75

Correlation between Students' Senses of Belonging and Identity across Levels

Variables	1	2	3	4	5	6	7	8

Belonging

1. School

2. City	.652**						
3. Country	.363**	.252**					
4. World	.692**	.645**	.387**				
Identity							
5. School	.601**	.448**	.261**	.458**			
6. City	.446**	.512**	.231**	.443**	.594**		
7. Country	.294**	.210**	.722**	.306**	.405**	.388**	
8. World	.386**	.380**	.248**	.407**	.501**	.644**	.404**
* <i>p</i> < .05. ** <i>p</i> < .01.							

Table 76 illustrated the correlations between the seven identified antecedents of students' belonging across levels (i.e., personal characteristics, value, emotions, motivation, environmental quality, activities, and social interactions) and senses of belonging (i.e., school belonging, city

belonging, country belonging, and world belonging).

Regarding students' **positive and negative affect**, students who reported more positive affect tended to report greater school, city, and global belonging. Those with negative affect were more likely to report lower levels of school, city, national, and global belongings. Concerning students' **personality**, those who were extroverted tended to have a higher level of school, city, and world belonging. Students who exhibited greater agreeableness and conscientiousness tended to report a greater sense of belonging across all four levels. In contrast, students with higher levels of neuroticism tended to experience a greater sense of belonging to their school, city, nation, and world. Additionally, students who were more open-minded were likely to have a higher level of school, city, and global belonging.

When it comes to **value** to the school, valuing school's culture and history, and valuing using Mandarin at school were correlated with greater school, city, national, and global belonging. Those who valued using Cantonese and English tended to have a better school, city, and world belonging. Concerning the value to Hong Kong, valuing learning Hong Kong culture and history, and using three languages (i.e., Cantonese, Mandarin, and English) were positively correlated with students' school, city, national, and world belonging. Regarding students' belonging to China,

valuing studying Chinese culture and history was correlated with better school, Hong Kong, national and global belonging. Concerning world belonging, valuing global culture and history, and using Chinese, English, and multiple languages in the world were correlated with greater belonging across all four levels.

With respect to the **emotions**, students who reported experiencing greater empathy, sympathy, and enjoyment tended to have higher school, city, national, and global belonging. In contrast, those who reported feeling anger and anxiety more often tended to report poorer belongings across all four levels.

Concerning **motivation**, academic effort and political interests were positively correlated with four levels of belonging. Academic procrastination had a negative correlation with school belonging, city belonging, and world belonging.

With respect to the **environmental quality**, perceiving school, city, nation, and world as safe, respectful, and diverse was positively correlated with students' school, Hong Kong, national, and global belonging. Regarding the time students spent on media platforms, the usages of Hong Kong and international news platforms, Chinese news platforms and social media, and international social media were correlated with students' senses of belongings across four levels, with two exceptions. One was the correlation between Hong Kong and international news platforms and students' national belonging, and the other one was the correlation between Chinese news platforms and social media and belonging to Hong Kong. Notably, those who spent more time on international social media reported poorer national belonging.

Concerning the participation in **activities**, participation in activities were correlated with students' senses of belongings to school, city, country, and the world. However, there were also two exceptions. Specifically, there was no significant correlation between students' participation of activities in Mainland China and their Hong Kong belonging, as well as the correlation between taking part in activities in Hong Kong and sense of national belonging. Furthermore, it should be

noted that frequent participation in international activities was found to be negatively correlated with students' national belonging.

Finally, when it comes to **social interactions**, students who had greater interactions with their peers, teachers, parents, people in Hong Kong, people in China, and people in the world were more likely to report a better sense of belonging across four levels, but there were two exceptions. The first was the non-significant correlation between interacting with people in China and students' city belonging. Another was the nonsignificant correlation between interacting with people in the world and national belonging.

 Table 76

 Correlation between Factors and Students' Senses of Belonging across Levels

Factors	Senses of b	oelonging		
	School	City	Country	World
Personal characteristics				
I-PANAS-SF				
Positive affect	.195**	.203**	.040	.224**
Negative affect	178**	107**	067*	245**
Big five				
Extraversion	.153**	.173**	013	.165**
Agreeableness	.312**	.246**	.178**	.270**
Conscientiousness	.202**	.173**	.100**	.259**
Neuroticism	133**	112**	083**	223**
Openness	.173**	.183**	.003	.156**
Value				
School				
Culture	.522**	.396**	.289**	.441**
History	.492**	.395**	.297**	.441**
Using Cantonese	.230**	.390**	046	.229**
Using Mandarin	.245**	.086**	.554**	.234**
Using English	.287**	.300**	006	.282**
City				
Culture	.372**	.523**	.121**	.413**
History	.352**	.445*	.181**	.380**
Using Cantonese	.269**	.417**	075**	.247**
Using Mandarin	.230**	.115**	.533**	.253**
Using English	.267**	.329**	010	.280**
Country				
Culture	.324**	.263**	.650**	.334**
History	.269**	.233**	.510**	.297**
World				
Culture	.328**	.371**	.185**	.377**
History	.300**	.324**	.184**	.353**

Using Chinese	.302**	.278**	.505**	.327**
Using English	.287**	.324**	063*	.281**
Using multiple languages	.308**	.387**	.105**	.340**
Emotions				
AMES				
Cognitive empathy	.123**	.131**	.102**	.122**
Affective empathy	.135**	.141**	.075**	.122**
Sympathy	.220**	.237**	.111**	.213**
Achievement emotions				
Questionnaire				
Enjoyment	.354**	.292**	.207**	.300**
Anger	272**	169**	145**	186**
Anxiety	195**	109**	107**	140**
Motivation	<u>—</u>			
Academic effort	.357**	.302**	.132**	.378**
Academic procrastination	082**	.000	099**	086**
Political interest	.188**	.208**	.061*	.266**
<b>Environmental quality</b>				
Perceived safety				
School	.549**	.420**	.227**	.461**
City	.437**	.477**	.302**	.410**
Country	.300**	.214**	.736**	.337**
World	.376**	.347**	.143**	.428**
Perceived respect				
School	.572**	.436**	.241**	.469**
City	.470**	.517**	.215**	.440**
Country	.332**	.224**	.708**	.367**
World	.484**	.423**	.256**	.523**
Perceived diversity		0		.0_0
School	.601**	.448**	.261**	.458**
City	.446**	.512**	.231**	.443**
Country	.294**	.210**	.722**	.306**
World	.386**	.380**	.248**	.407**
Media				1107
Hong Kong and international				
news platforms	.114**	.117**	012	.152**
Chinese news platforms and				
social media	.067*	042	.438**	.124**
International social media	.103**	.163**	169**	.119**
Activities				,
Participation of activities				
School	.354**	.296**	.078**	.287**
Community	.301**	.232**	.079**	.286**
City	.251**	.193**	.031	.216**
Country	.078**	.018	.393**	.165**
World	.156**	.155**	089**	.186**
Social curriculum and co-			.007	.100
curriculum activities				
City	.315**	.280**	.241**	.301**
Country	.259**	.182**	.408**	.283**
World	.247**	.210**	.196**	.261**
110110		.210	.170	.201

Social interactions				
Peers	.471**	.309**	.155**	.434**
Teachers	.454**	.300**	.184**	.403**
Parents	.357**	.317**	.188**	.431**
People in Hong Kong	.431**	.500**	.128**	.484**
People in China	.129**	.037	.529**	.192**
People in the world	.160**	.141**	016	.166**

<sup>\*</sup>*p* < .05. \*\**p* < .01.

# Regression Analyses

To evaluate the independent influences of seven identified antecedents (i.e., personal characteristics, value, emotions, motivation, environmental quality, activities, and social interactions) on students' senses of belongings (i.e., school belongings, city belongings, country belongings and world belongings), hierarchical regression analyses were conducted including gender, age, ethnicity, birthplace, and the corresponding sense of belonging and identity as the covariates.

The results in Table 77 demonstrated that the collective effect of the covariates accounted for a significant proportion of the variability in students' sense of belonging across all four levels, including school, city, country, and the world. Specifically, the covariates explained 31%, 26%, 48%, and 27% of the variability in school, city, country, and world belonging, respectively. Specifically, students' gender, age, ethnicity, and birthplace did not significantly predict their sense of belonging. Only the corresponding senses of identity and sense of belonging in Time 1 were found to be significant covariates for students' senses of belonging across levels in Time 2.

 Table 77

 Analyses of the Covariates

Covariates	School	l	City		Countr	y	World	
	$\Delta R^2$	β						
	.31**		.26**		.48**		.27**	
Corresponding sense of belonging in 1st term		12.27**		10.27**		12.41**		14.72**
Gender		-1.79		-0.49		-0.45		-1.62

Age	1.17	1.84	1.12	1.50
Ethnicity	-0.21	-0.09	-1.37	-0.43
Birthplace	0.07	-1.57	0.82	-0.71
Sense of identity to school	6.49**			
Sense of identity to city		5.37**		
Sense of identity to country			6.35**	
Sense of identity to world				4.14**

<sup>\*</sup>*p* < .05. \*\**p* < .01.

In the second step of the regression analysis, we used seven factors as predictors, including personal characteristics, values, emotions, motivation, environmental quality, activities, and social interactions.

Factors Predicting School Belonging. Concerning school belonging, all these seven factors significantly predicted students' school belonging in Time 2. Regarding personal characteristics, positive affect positively predicted school belonging ( $\beta$  = .10, p < .01) and negative affect negatively predicted belonging to school ( $\beta$  = -.11, p < .01). Similarly, value-related factors including perceived importance of learning school history ( $\beta$  = .12, p < .01) and using English at school ( $\beta$  = .07, p < .05) explained 2% of the variability in students' school belonging (p < .01). Concerning emotions, enjoyment ( $\beta$  = .11, p < .01) positively predicted school belonging, affective empathy ( $\beta$  = .08, p < .01) and anger ( $\beta$  = -.08, p < .05) negatively predicted school belonging.

In addition, **motivation**, specifically academic effort ( $\beta$  = .09, p < .01), positively predicted students' school belonging, explaining 1% of the variability in students' school belonging (p < .01). Moreover, **environmental quality** was also an important predictor of students' sense of school belonging, explaining 5% of the variability (p < .01). Factors of environmental quality including the perception of school safety ( $\beta$  = .08, p < .01) and diversity ( $\beta$  = .14, p < .01), and using local and international news platforms ( $\beta$  = .06, p < .05) predicted a higher sense of school belonging, even after controlling for the baseline levels of school belonging at Time 1.

Furthermore, participation in **activities** explained the highest amount of variability with 6% (p < .01). Specifically, participating in more international activities  $(\beta = -.09, p < .01)$  led to a weaker sense of school belonging, while taking part in the curriculum and co-curricular activities in Hong Kong  $(\beta = .23, p < .01)$  positively predicted students' sense of school belonging. Lastly, **social interactions** significantly explained 3% of the variability in students' school belonging (p < .01). Students who kept strong relationships with their teachers reported a stronger sense of school belonging  $(\beta = .09, p < .05)$ .

Factors Predicting City Belonging. In terms of the sense of city belonging, personal characteristics could account for 2% of the variability (p < .01). Specifically, positive affect ( $\beta = .08$ , p < .05) predicted greater city belonging, and negative affect ( $\beta = -.09$ , p < .05) led to weaker city belonging. Furthermore, students' values significantly explained 3% of the variability (p < .01) in their city belonging. Recognizing the importance of studying Hong Kong culture ( $\beta = .13$ , p < .01) had a positive predictive effect on their belonging to Hong Kong. Students' emotions could also account for 3% of the variability in city belonging (p < .01), with their affective empathy ( $\beta = .13$ , p < .01) negatively predicting city belonging, but their sympathy ( $\beta = .11$ , p < .05) and enjoyment ( $\beta = .12$ , p < .01) positively predicting sense of city belonging.

Although **motivation** could significantly explain 1% of the variability (p < .05), academic effort, academic procrastination, and political interest did not each significantly predict students' city belonging. **Environmental quality** was a relatively strong predictor, explaining up to 6% of the variability (p < .01) in students' belonging to their city. Students' perceived respect ( $\beta = .15$ , p < .01) and diversity ( $\beta = .13$ , p < .01) in Hong Kong and using international social media ( $\beta = .06$ , p < .05) could enhance their belonging to Hong Kong. Participation in **activities** accounted for 5% of the variability (p < .01) in students' belonging to Hong Kong. Specifically, involvement in international activities ( $\beta = -.11$ , p < .01) predicted a weaker city belonging, while participation in the curriculum and co-curricular activities in Hong Kong ( $\beta = .22$ , p < .01) predicted a stronger belonging to Hong Kong. Finally, **social interaction** explained 3% of the variability in students'

city belonging (p < .01), with peer interaction ( $\beta = .09$ , p < .05) and interaction with people in Hong Kong ( $\beta = .16$ , p < .01) positively predicting students' belonging to Hong Kong.

Factors Predicting National Belonging. When it comes to the sense of national belonging, personal characteristics, and motivation did not significantly explain any variability in students' national belonging. However, students' values could significantly explain 1% of the variability (p < .01) in their national belonging. Valuing Chinese culture ( $\beta = .12, p < .01$ ) had a positive effect on students' national belonging. Students' emotions also explained 2% of the variability in their national belonging (p < .01). Their experiences of anger ( $\beta = -.10, p < .01$ ) negatively predicted their belonging to China.

Furthermore, **environmental quality** explained 4% of the variability in students' belonging to China (p < .01). Students' perceived safety in China ( $\beta = .21$ , p < .01) and using Chinese new platforms and social media ( $\beta = .13$ , p < .01) strengthened students' national belonging, whereas using international social media ( $\beta = .09$ , p < .01) led to a weaker sense of national belonging. Participation in **activities** significantly explained 7% of the variability in students' national belonging, specifically with participation in curriculum and co-curricular activities in Mainland China ( $\beta = .38$ , p < .01) positively predicting students' sense of national belonging. However, taking part in international activities ( $\beta = -.12$ , p < .01) and participation in curriculum and co-curriculum activities in other countries ( $\beta = -.17$ , p < .01) both led to weaker national belonging. Finally, **social interaction** accounted for 1% of the variability in students' sense of belonging to China (p > .05). Students' interaction with people from other countries predicted a weaker sense of their national belonging ( $\beta = -.05$ , p < .05).

Factors Predicting Global Belonging. Concerning students' global belonging, personal characteristics significantly explained 3% of the variability in their global belonging (p < .01). Specifically, students' positive affect positively predicted ( $\beta = .11, p < .01$ ) and negative affect negatively predicted their sense of world belonging ( $\beta = -.08, p < .05$ ). Furthermore, students' value towards the world significantly explained 2% of the variability (p < .01). Valuing learning global

history ( $\beta$  = .09, p < .05) and using Chinese in the current world ( $\beta$  = .10, p < .01) positively predicted students' world belonging. Students' **emotions** also accounted for 2% of the variability in their global belonging (p < .01), with affective empathy ( $\beta$  = -.08, p < .05) predicting a weaker sense of global belonging, while their sympathy ( $\beta$  = .11, p < .01) and enjoyment ( $\beta$  = .12, p < .01) predicted greater global belonging. In addition, **motivation** explained 2% of the variability (p < .01), in which academic effort ( $\beta$  = .12, p < .01) significantly and positively predicted students' sense of global belonging.

Environmental quality strongly explained 4% of the variability in students' global belonging (p < .01). Students' perceived respect ( $\beta = .11, p < .01$ ) and diversity ( $\beta = .13, p < .01$ ) in the world enhanced their global belonging. Participation in activities explained 7% of the variability (p < .01). Specifically, participation in international activities negatively predicted students' global belonging ( $\beta = -.07, p < .05$ ), but participation in curriculum and co-curricular activities in Hong Kong ( $\beta = .22, p < .01$ ) significantly and positively predicted their global belonging. Finally, although social interaction significantly explained 4% of the variability in students' global belonging (p < .01), their interactions with friends, teachers, and parents, as well as interaction with people in Hong Kong, Mainland China, and other countries were not significant predictors on their own.

Table 78

Hierarchical Multiple Regression Analyses

Predictor	Sc	hool	C	ity	Co	untry	Wo	orld
	$\Delta R^2$	β						
Personal characteristics	.02**		.02**		.01		.03**	
Positive affect		.10**		.08*		.00		.11**
Negative affect		11**		09*		06		08*
Extraversion		.02		.05		.02		.04
Agreeableness		.05		.02		.03		.04
Conscientiousness		.01		02		.02		.02
Neuroticism		00		04		.04		03
Openness		02		.02		.01		.04
Value	.02**		.03**		.01**		.02**	
Culture		.06		.13**		.12**		05
History		.12**		.03		01		.09*

Using Cantonese		.02		.06				
Using Mandarin		.00		01				
Using English		.07*		.06				01
Using Chinese								.10**
Using multiple languages								.01
Emotion	.02**		.03**		.02**		.02**	
Cognitive empathy		02		02		00		04
Affective empathy		08*		13* *		06		08*
Sympathy		.07		.11*		01		.11**
Enjoyment		.11**		.12**		02		.12**
Anger		08*		06		10**		04
Anxiety		.06		.03		02		.00
Motivation	.01**		.01*	.00	.00	.02	.02**	
Academic effort	.01	.09**	.01	.06	.00	.00	.02	.12**
Academic								
procrastination		04		03		03		05
Political interest		02		.03		03		02
Environment quality	.05**	.02	.06**	.03	.04**	.05	.04**	.02
Safety	.03	.08*	.00	.06	.04	.21**	.04	.05
Respect		.07		.15**		.00		.11**
Diversity		.07 .14**		.13**		.05		.13**
Local and		.17		.13		.03		.13
international news		.06*		.03		.03		.04
platforms		.00		.03		.03		.04
Chinese new								
platforms and social		.01		06		.13**		.00
media		.01		00		.13		.00
International social								
media		.01		.06*		09**		.03
Activities	.06**		.05**		.07**		.07**	
School	.00.	.05	.03	.06	.07.	.02	.07.	.06
		.05		00		.02 01		
Community		.03						.00
City				.02		.01		.01
Country		05		02		.04		03
World		09**		11**		12**		07*
Curriculum and co-		22**		.22**		02		.22**
curriculum activities		.23**		.22**		02		.22**
- city								
Curriculum and co-		0.6		07		20**		02
curriculum activities		.06		07		.38**		.02
– country								
Curriculum and co-		07		0.5		1744		0.2
curriculum activities		07		.05		17**		.03
- world	0244		0.0 % %		0.1		0.4 % %	
Social interactions	.03**	0.0	.03**	0.0 **	.01	0.4	.04**	0.5
Peers		.08		.09*		04		.07
Teachers		.09*		06		.06		.05
Parents		.03		.00		.04		.07
City		.05		.16**		05		.08

Country	01	01	.03	.06
World	04	05	05*	04

<sup>\*</sup>p < .05. \*\*p < .01.

### Multilevel Modelling

To better understand the distribution of variances at different levels (time, student, and school), we initially performed a variance analysis. The results indicated that significant proportions of variances were observed at the time level (school belonging: 46%, city belonging: 51%, national belonging: 29%, global belonging: 50%) and the student level (school belonging: 48%, city belonging: 47%, national belonging: 67%, global belonging: 48%). Conversely, only a small and non-significant portion of the variances were found at the school level (school belonging: 6%, city belonging: 2%, national belonging: 4%, global belonging: 2%). Consequently, we proceeded with a multilevel modelling analysis, with time nested under student, to identify the primary predictors of students' sense of belonging. Given the limited proportion of variances at the school level, a three-level analysis was not deemed necessary.

Factors Predicting School Belonging. To determine the most influential factors affecting students' sense of belonging, we report here the predictors with relatively high loadings. Notably, students who resided with additional household members (besides parents and helpers) tended to have a stronger sense of belonging to their school. Following closely were students who perceived their school as diverse and respectful. Furthermore, students who valued their school's culture and history, along with those who perceived their school as a safe environment, also displayed higher levels of school belonging.

Among these predictors, it is important to note that students have little control over whether they live with others or whom they live with. However, several factors that schools can intentionally improve upon include enhancing school diversity, fostering respect within the school community, nurturing students' appreciation for school culture and history, and prioritizing school safety. In contrast, we observed that students attending Band 3 schools or those who had a quiet study space at home (typically indicating higher family socio-economic status) reported lower

levels of school belonging. Table 79 provides a comprehensive list of all significant predictors of school belonging, arranged in descending order.

Table 79

Multilevel Modelling for the Predictors of School Belonging

Predictors	β	Sig.
Living with others	0.416	***
School diversity: My school is full of diversity.	0.216	***
School respect: I feel respected in my school.	0.176	***
Valuing school culture: Studying my school's culture is important.	0.137	***
Valuing school history: Studying my school's history is important.	0.128	***
School safety: My school is a safe place.	0.119	***
Living with father	0.082	*
Activities: School	0.081	***
Social interactions: Peers	0.064	***
Academic effort	0.05	**
Number of cell phones with internet access at home	0.046	*
Valuing country culture: Studying Chinese culture is important.	0.039	*
Enjoyment	0.038	*
Valuing Mandarin at school: Using Mandarin in school is important.	0.031	*
Valuing English in world: Using English in the current world is important.	0.031	*
Personality: Agreeableness	0.023	***
Student grade	-0.033	**
Anxiety	-0.053	***
Band 3 school	-0.1	**
Objects at home: a quiet place to study	-0.164	***

**Note.** \*p < .05, \*\*p < .01, \*\*\*p < .001. All the non-significant predictors have been removed from the analyses and the current table.

Factors Predicting City Belonging. We also report here the factors that exhibited relatively high loadings to identify the most influential predictors of city belonging. Therefore, enhancing these factors should yield the greatest efficiency in fostering a sense of belonging to the city among students. The findings indicated that students who primarily spoke Cantonese at home and had established strong social connections within their community displayed a high level of city belonging. Additionally, students who held the belief that Hong Kong was a diverse, respectful, and safe place also reported a strong sense of belonging to the city. Furthermore, students who valued

Hong Kong's culture, history, and language (specifically Cantonese) tended to exhibit a high level of city belonging. Therefore, to enhance students' sense of belonging to the city, the most effective strategies would involve: (1) promoting the use of Cantonese at home, in schools, and throughout the city; (2) fostering an appreciation for Hong Kong's diversity, respect, and safety; (3) encouraging students to engage in social interactions with individuals in their local community; and (4) cultivating students' appreciation for Hong Kong's culture and history. Conversely, students who had access to numerous books at home for academic purposes (indicative of higher family socioeconomic status) and those who were born in mainland China reported relatively low levels of city belonging. Table 80 presents all the significant predictors of city belonging, listed from the positive predictor to the most negative predictor.

Table 80

Multilevel Modelling for the Predictors of City Belonging

Predictors	β	Sig.
Main language at home: Cantonese	0.166	**
Social interactions: People in the community	0.162	***
City diversity: Hong Kong is full of diversity.	0.150	***
City respect: I feel respected in Hong Kong.	0.140	***
City safety: Hong Kong is a safe place.	0.130	***
Valuing city culture: Studying Hong Kong culture is important. Valuing Cantonese at school: Using Cantonese in Hong Kong is	0.114	***
important.	0.089	***
Valuing city history: Studying Hong Kong's history is important.	0.075	**
Valuing Cantonese at school: Using Cantonese in school is important.	0.067	**
Enjoyment	0.043	**
Activities: School	0.042	**
Media exposure: International Social Media	0.039	**
Academic Procrastination	0.034	*
Personality: Agreeableness	0.013	**
Academic performance of the subject taught by class teacher	0.002	*
Student grade	-0.034	**
Media exposure: Chinese new platforms and social media	-0.048	**
Objects at home: books to help with schoolwork	-0.125	**
Born in Mainland	-0.198	***

**Note.** \*p < .05, \*\*p < .01, \*\*\*p < .001. All the non-significant predictors have been removed from the analyses and the current table.

Factors Predicting National Belonging. Students who self-identified as Chinese exhibited a strong sense of national belonging, followed by those who reported living with others in addition to their parents and helpers. Additionally, students who perceived China as a safe, diverse, and respectful country also expressed high levels of national belonging. Furthermore, students who placed value on Chinese culture, regularly accessed Chinese news platforms and social media, showed a tendency to have a strong sense of national belonging. Additionally, students who established social interactions with individuals in the country also reported stronger sense of national belonging than those who did not. Therefore, to effectively promote national belonging among students, we may focus on these key strategies: (1) enhancing students' perceptions of the country's safety, diversity, and respect, (2) fostering students' appreciation for Chinese culture and language (i.e., mandarin), and (3) strengthening students' social interactions with people in the country. Interestingly, students who frequently used Chinese social media reported higher levels of national belonging, while those who frequently accessed international social media displayed lower levels of national belonging. The conflict between these two platforms of social media warrants policy attention. Lastly, it is worth noting that students attending Band 3 schools exhibited relatively weaker national belonging than those attending Band 1 and Band 2 schools. For a comprehensive list of significant predictors, refer to Table 83.

Table 81

Multilevel Modelling for the Predictors of National Belonging

Predictors	β	Sig.
Chinese	0.243	*
Living with others	0.208	*
Country safety: China is a safe place.	0.174	***
Country diversity: China is full of diversity.	0.161	***
Country respect: I feel respected in China.	0.146	***
Valuing country culture: Studying Chinese culture is important.	0.145	***
Media exposure: Chinese news platforms and social media	0.072	***
Social interactions: People in the country	0.071	***
Valuing Mandarin at school: Using Mandarin in school is important.	0.052	**
Valuing Chinese in world: Using Chinese in the current world is		
important.	0.052	**

Valuing country history: Studying Chinese history is important.	0.051	**
Student grade	-0.022	**
Valuing English at school: Using English in school is important.	-0.026	*
Media exposure: International Social Media	-0.071	***
Band 3 school	-0.074	**

**Note.** \*p < .05, \*\*p < .01, \*\*\*p < .001. All the non-significant predictors have been removed from the analyses and the current table.

**Factors Predicting Global Belonging.** Students who held the belief that the world is a place characterized by respect and diversity tended to exhibit a stronger sense of global belonging. Additionally, students who actively engaged in social interactions within their local community also reported a higher level of global belonging. Interestingly, students who valued Chinese language in the world also presented stronger global belonging. Therefore, to enhance students' sense of belonging towards the world, the most effective strategies would involve (1) fostering students' perception of respect and diversity on a global scale, (2) promoting their social interactions with individuals in their community, and (3) promoting students' values about the Chinese language in the world. Contrary to what previous literature suggests (e.g., Hsu & Wang, 2010; Roger, 2010), our findings indicate that Hong Kong students who have strong social connections within their local community actually exhibit a stronger sense of global belonging, as opposed to those who establish relationships with individuals from international backgrounds (which is non-significant in our current analysis). Among the significant predictors listed in Table 82, none of them, in fact, suggested that our students require extensive exposure to the world, such as traveling to other countries or forming relationships with individuals from other countries, to establish a strong sense of world belonging. Instead, these significant predictors highlight the importance of enhancing students' perception of the world and strengthening their relationships with individuals in their immediate surroundings, including parents, peers, and schools, as this can greatly contribute to their sense of global belonging.

Table 82

Multilevel Modelling for the Predictors of Global Belonging

Predictors	β	Sig.
World respect: I feel respected in the world.	0.241	***
World diversity: The world is full of diversity.	0.118	***
Social interactions: People in the community	0.110	***
Valuing Chinese in world: Using Chinese in the current world is		
important.	0.076	***
World safety: The world is a safe place.	0.075	***
Valuing school culture: Studying my school's culture is important.	0.064	**
Valuing city culture: Studying Hong Kong culture is important.	0.064	**
Social interactions: Parents	0.060	***
Political interest	0.048	**
Social interactions: Peers	0.048	**
School safety: My school is a safe place.	0.048	*
Valuing country history: Studying Chinese history is important.	0.046	*
Valuing multiple languages in world: Using multiple languages in the current world is important.	0.039	*
Activities: School	0.036	*
Personality: Neuroticism	0.021	**
Overall average academic performance	0.002	*
Female	-0.069	*
Objects at home: a quiet place to study	-0.076	*

**Note.** \*p < .05, \*\*p < .01, \*\*\*p < .001. All the non-significant predictors have been removed from the analyses and the current table.

## Part Two – Qualitative Phase

# Methodology

### **Participants**

A total of 29 students from secondary one to six from seven schools in Hong Kong participated in the interviews. Around half of the interviewees were female (51.7%) and they were on average 14.04 years old (SD = 2.14). The interviewees were predominately Chinese (93.1%), Hong Kong permanent residents (93.1%), and born in Hong Kong (79.3%).

#### Measures

Ten-minute semi-structured individual interviews were conducted over the phone. Each of the interviews consisted of eight questions in which students were asked to think about the events that promoted their senses of belonging the most (e.g., "At which moment did you experience the greatest sense of belonging to the school?") and their recommendations for further enhancing senses

of belonging across four levels (e.g., "What do you think can enhance students' sense of belonging toward the school?"). After answering each question, participants were asked to explain their answers and provide details about their thoughts and experiences. The questions were organized by levels, starting with the school level, followed by the city, the country, and the world levels.

#### **Procedures**

Students who participated in the quantitative study were asked to indicate in the survey whether they had interest to participate in individual interviews. A total of 187 students expressed interest and left their contact information in the survey. We randomly contacted 114 of them and successfully arranged interviews with 29 students. All the interviews were audio recorded with consents from students and their parents.

### Data Analysis

We used thematic analyses to analyse the data and determine the major factors yielding increased senses of belonging. The bottom-up approach was used to code the interview data. Our team read through each transcript and recorded themes from the responses. After collecting initial themes, the team coded every transcript accordingly and added new themes when needed. Then, we developed models to explain mechanisms between constructs and the relationships between identified antecedents and students' senses of belonging across levels.

### Results

#### School Belonging

Students usually experienced a stronger sense of belonging to their school when participating in school activities and interacting with teachers and schoolmates. The results showed that students' sense of belonging was developed when students felt involved, connected, proud, and cared for.

School Events Increase Student Involvement Leading to Greater School Belonging.

Students reported that they gained a sense of involvement from whole school events like school anniversary, athletics meet, dress casual day, and Christmas party. These events gathered all people

of the school to participate in the same event, giving to students a sense that they were included in the activities and were part of the school. This sense of involvement improved students' sense of school belonging and helped them build a stronger connection to the school.

一起組織出外遊玩,一起做表演節目的時候[歸屬感最強],[...],因為有份參與,有參與策劃,所以有[歸屬感]。(Interviewee 092, December 15, 2023)

One of the interviewees expressed that they experienced a sense of engagement primarily through participation in school events. It was observed that school events played a crucial role in bringing students together, providing opportunities for all students to participate, and fostering a sense of belonging to the school.

参加活動的時候才[感到]有[歸屬感],例如聖誕聯歡會和新年活動,[...],因為那時候會覺得自己被重視,因為他們要舉辦活動一定是全班[參與]的,他一定會來叫你[參與],平時沒有甚麼事的話都不會叫你。(Interviewee 078, December 23, 2023)

Specifically, class activities enhanced students' sense of involvement. Activities such as class performance could unite the class, giving students a sense of inclusion.

聖誕聯歡會的時候對學校的歸屬感最強,因為整個學校每個班別都有各自表現的機會,[...],[那時候會感覺]很融入在班別班中。(Interviewee 065, December 23, 2023)

Extra-curricular Activities Foster Relationships with Schoolmates Leading to School Belonging. When students participated in extra-curricular activities, such as school teams, clubs, or organizations, they had the opportunity to interact with peers outside of the classroom or students from other grades. This gave them a chance to develop social connections with other students who shared similar interests.

参加校隊,[...],喜歡比賽,以及可以和學校的師兄師姐玩得更親近。 (Interviewee 072, December 12, 2023) Notably, offering a variety of extracurricular activities at school could provide students with a sense of belonging and an engaging atmosphere. In such activities, students had the opportunity to interact and communicate with other classmates. This could help students establish close relationships and feel that they were cared for and valued by the school.

因為學校最近才開始上全日課,活動就開始多,[...],之前累積想舉辦的比賽,可以班際比賽那些活動,或是生日會、社團那些都開始陸陸續續地開放,其實現在我覺得學校真的很好,[...],每天都有活動就覺得有種快樂的氣氛,就有歸屬感,因為多了很多互動。(Interviewee 060, December 12, 2023)

However, the COVID-19 pandemic resulted in significant disruptions to the traditional school environment, including the shift to online learning. This led to a lack of opportunities for students to interact with each other and form social connections, which could result in a sense of isolation and disengagement from school. Therefore, offering extracurricular activities was more important than ever to bring students together and foster a sense of school belonging.

現在都上了幾年網課,然後回到學校,人與人之間的感情變差了,應該說是淡了,[...],我也覺得不太有歸屬感,只有活動的時候才有歸屬感。(Interviewee 078, December 23, 2023)

Students' Contributions to School Promote School Pride, Leading to School Belonging. When students took an active role in organizing activities or clubs, they felt a sense of ownership and responsibility. By contributing to the school in this way, students felt that they were making a positive impact and helping to create a better school environment. This could lead to a sense of pride at their school and a greater sense of school belonging.

組織一些學會的時候,我就會感到很有歸屬感,好像在學校裏有些貢獻,幫了學校的忙。[...],我做了兩個學會,那我就覺得這是對學校非常好的,從而對學校有歸屬感。(Interviewee 008, November 19, 2023)

Additionally, an interviewee emphasized the significance of representing their school in competitions as a means of cultivating a sense of belonging and school pride. When students took part in competitions and achieved favourable outcomes, it helped generate a sense of accomplishment and pride for their school.

代表學校出去參加比賽,然後可能是贏了,或者是有特別的成就感的時候[感到最有歸屬感]。[...],學校本來沒有足球隊,但因為我自己喜歡踢足球,我就和一些同級的同學及師姐一起組成了一隊校隊,我們就代表學校去比賽,但學校就沒有給予我們資源,我們就靠自己努力踢進了淘汰賽,我們就覺得整件事很有成就感,以及代表學校去[參加]比賽很自豪。(Interviewee 018, December 16, 2023)

Teachers' Commitment and Care Help Promote School Belonging. When teachers showed care and concern for their students, especially during times of difficulty, it created a sense of warmth and security that made students feel like they were part of the school. In the example given, the interviewee's teacher showed care and concern when the interviewee was injured. This act of kindness made the interviewee feel like the school was another home, and that they were part of a caring and supportive school community.

最強的話可能是班主任在我受傷的時候會來關心我,那時候我就會覺得好像別 人說的那樣:學校是另外一個家。例如有一次不小心做夾板刮到脖子,然後他 就會吃飯的時候會主動上前來安慰我或者主動了解整件事的經過。

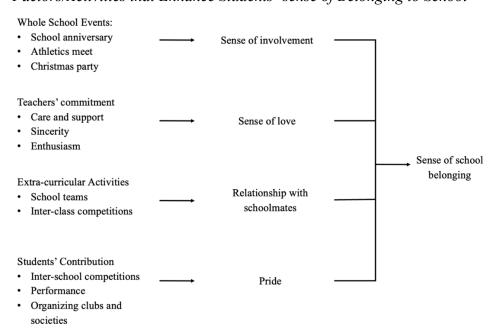
(Interviewee 062, December 23, 2023)

An interviewee noted that school ceremonies were meaningful because they included expressions of care and encouragement from their teacher. The teacher's words of blessing and expectation for the students' future success demonstrated teachers' commitment to their student's well-being and academic achievement (see Figure 1 for more details).

因為那時候學校特意為我們舉辦了一個祝福禮,就是祝福我們在初中生活的完畢,正式踏入高中生活。那時候就覺得學校挺不錯的,有對我們這個升級的儀式...有個儀式感給我們。[...],因為裡面都有些祝福,班主任都有跟我們說一些祝福我們上高中有些什麼期望,也希望我們上到高中之後可以認真讀書。(Interviewee 097, December 23, 2023)

Figure 1

Factors/Activities that Enhance Students' sense of Belonging to School



Suggestions for Enhancing School Belonging

Organizing More Extra-Curricular Activities to Enhance Students' Enjoyment and Interpersonal Relationship. In the context of the pandemic, where many schools faced restrictions on social gatherings, it was important for schools to find ways to continue providing opportunities for students to socialize and connect with one another. One possible suggestion a student mentioned was for school societies or clubs to allocate funding for events or activities that allowed students to gather, such as a gathering with food or a day-long event. Importantly, these events should prioritize creating an atmosphere of fun and enjoyment for students, rather than focusing on academic or instructional activities. By giving students the opportunity to interact with one another in a relaxed

and informal setting, students were more likely to develop a sense of belonging and connection to their school.

給更多時間予班別或社或學會的活動,可能[給予我們]更多活動時間,因為近年疫情。[...],可能是學會撥款給他們聚會,可能吃點東西,那個時間可能是一天,讓他們在那一天玩玩,那就會[有更大]歸屬感。不要有老師,不要心理講座,不需要那些,而是同學之間互相相處,會令學生對學校[更加]有歸屬感。(Interviewee 092, December 15, 2023)

Notably, organizing more group activities was a common strategy used by schools to create a positive and inclusive learning environment. By offering large-scale events such as sports carnivals, Christmas parties, and school trips, students had opportunities to engage in activities that were fun and enjoyable, which in turn could increase their sense of belonging to the school community. When schools arranged these activities, students often perceived them as the school's commitment to their well-being and happiness. They could feel like the school was committed in creating a fulfilling school experience for them, which fostered students' sense of gratitude and connection to their school.

舉辦更多團體活動,如一些大型的活動,好像陸運會、聖誕派對、學校旅行日這些,其實已經可以大大提升學生對學校的歸屬感。舉辦更多這些活動的時候,學生就會覺得學校舉辦了這些活動給學生玩,會讓他們的校園生活變得更豐富,那自然學生就會覺得學校對他們好,所以這些學生就會有歸屬感。
(Interviewee 008, November 19, 2023)

Class activities could enhance class unity. Fostering a sense of belonging among classmates was a common approach used by schools to promote a positive and inclusive learning environment. By organizing class activities, students had opportunities to engage with their classmates and develop stronger relationships, which in turn could increase their sense of school belonging. Class activities take many forms, such as class outings, group projects, or team-building exercises. These

activities provide opportunities for students to work together as a team and develop a sense of shared purpose, which could enhance their sense of unity and belonging to their class. Importantly, class activities should prioritize inclusivity and participation, ensuring that all students have opportunities to engage and contribute. By creating a sense of collective ownership over class activities, students are more likely to feel included in their class and committed to supporting one another.

就是多舉辦班際的活動,因為你上課都是以班別的形式上課,就可以增加和他們. 之間的感情,增強對學校的歸屬感。因為班際活動它們是整個班[參與的],以集體一個班為力量去共同去做一些事,這樣會增加那個班的團結性,都會增強歸屬感。(Interviewee 040, December 3, 2023)

**Promote Teacher-Student Interactions to Foster the Relationships between Teachers** and Students. If teachers can create more opportunities to communicate with their students, students also feel more comfortable approaching their teachers and sharing their concerns. One way to increase teacher-student interactions is to encourage informal conversations outside of the classroom, including teacher-student lunches, after-school clubs, or even just casual chats before or after class. Such student-teacher interactions help build trust and rapport.

可以增加老師和學生之間的交流,[...],例如可以與老師來一個,不單止在課堂上,亦是私底下的交流、娛樂,老師不只是在課堂上看見他,然後下課後打招呼就走了,而是有更多的深入交流。[...],與老師說說,到底自己最近有甚麼煩惱,看看老師可不可以從中給予我們一些幫助。(Interviewee 071, December 20, 2023)

An interviewee stated that engaging in outdoor activities can be an effective way to foster positive relationships between teachers and students. Outdoor activities provide a more relaxed setting, which breaks down barriers and create opportunities for meaningful interactions. Outdoor activities take many forms, including nature walks, field trips, and team-building exercises.

我想是多做一些活動,讓老師與學生,和學生之間多點交流活動,不會是全部都集中在學業上,[...],可能在出去玩的時候,出去參觀的時候真的會感覺到每個老師有照顧我們出去參觀的感受或者各方面的,能夠體會他們不是在教學的時候的感覺,不會覺得很嚴厲。(Interviewee 021, December 11, 2023)

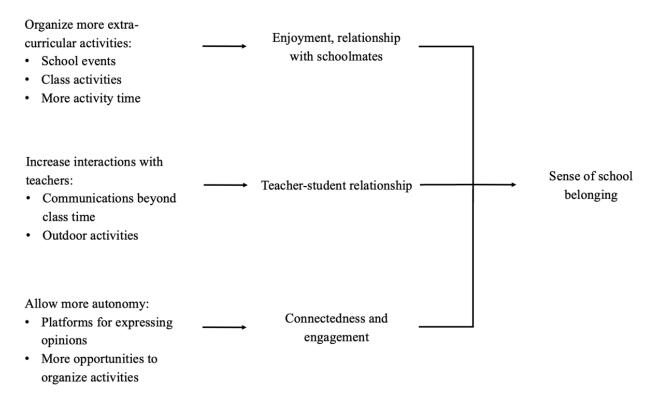
Allow More Autonomy to Enhance Students' Connectedness and Engagement. By giving students the freedom to propose, choose, and organize activities that interest them, teachers can promote students' sense of ownership at school, which in turn, yield greater student school belonging.

把籌辦活動的權力或自由,放開給學生,讓他們自己[提出]要舉辦甚麼[活動]、想玩甚麼,而不是學校[決定]。(Interviewee 020, December 3, 2023)

Importantly, schools should also create a safe and supportive environment where students feel comfortable expressing their opinions and ideas. Encouraging students to express their opinions is an effective way to foster an inclusive school culture. When students feel that their opinions and ideas are valued, they are more likely to feel engaged and belonging (see Figure 2 for more details).

跟學校發表意見,大家一起溝通,[...],學生可以和老師反映,然後都是輕鬆的,不需要申請表這類東西,就好像談天般,談及一些可能要改善的東西,老師亦都可以與學校、校長反映。(Interviewee 060, December 12, 2023)

**Figure 2**Suggestions to Enhance Students' Sense of Belonging to School



#### City Belonging

City Events Facilitate Sense of Involvement, Leading to City Belonging. Large-scale events such as marathons and sports games attracted participants from diverse communities and backgrounds, fostering a sense of unity and shared purpose among participants. Similarly, small-scale community events, including street fairs, markets, and concerts, provided opportunities for students to interact and connect with one another in Hong Kong, fostering a sense of shared identity and belonging within the city.

全民參與的,[如]馬拉松,或者奧運會。因為好像每個人都很積極地參與,覺得大家都是很想去參與一個活動,大家都是同類的人。(Interviewee 066, December 24, 2023)

As an interviewee mentioned that the New Year's Eve celebration in recent years, where fireworks were set off, creating a sense of ceremony, and marking the start of a new year. The celebration created a collective experience that fosters a sense of belonging to the city wherein they live.

可能就是前幾年的跨年,[...],那時就放煙花,覺得放煙花很有儀式感。我覺得煙花這樣東西是連繫著一個好像新的一年過來,今年好像重新放煙花,可能今年很多人都會看,再令我們有更多的歸屬感。(Interviewee 097, December 23, 2023)

Helped by Others Promoted Sense of City Belonging. Being helped by others in a city contributed to a sense of love and belonging to the city. For example, an interviewee stated that when he was not familiar with a city and needed help, such as asking for directions or assistance, and a stranger helped without hesitation, it helped him develop a sense of warmth and connection to the city. Such act of kindness contributed to a sense of community and shared identity within the city. When individuals feel that they are part of a community where people care about each other, they are more likely to feel a sense of belonging and attachment to the city.

就是有時出外問路,或者遇到不會說、不好意思要[別人]幫助,別人能看出來,他會主動幫你,令我覺得對這個城市有歸屬感。(Interviewee 114, December 24, 2023)

Specifically, an interviewee highlighted the importance of social connections and community support in fostering a sense of belonging to a city. When the interviewee's classmates were injured while playing ball in a park, other park visitors were willing to offer help and support. He was moved and felt a strong sense of warmth and connection to the city.

就好像我前幾天去公園玩的時候,和同學去打球的時候,他們受了傷,要其他的途人來幫忙,覺得很有歸屬感,很溫暖。(Interviewee 040, December 3, 2023)

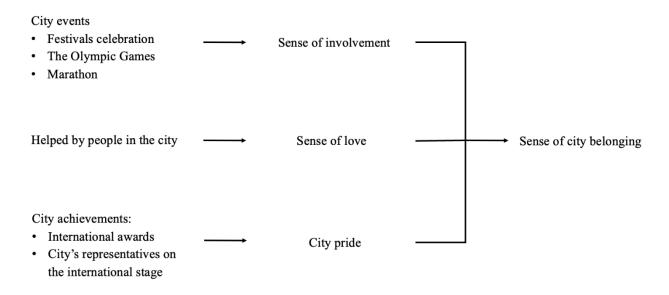
City Achievements Enhance People's Pride, Leading to Sense of City Belonging. The achievement of a city, such as a local sports team winning an international competition or a prominent scientist achieving recognition on the global stage, tend to influence its citizens, giving them a sense of pride and belonging. When individuals see their city's representatives achieving

success and recognition in an international competition, they develop a strong shared identity and a sense of purpose living in such a great city (see Figure 3 for more details).

我們這個城市的代表隊在國際賽事上取得勝利,或者有些厲害的科學家在國際舞台上有些代表我們這個城市有名的人物在國際舞台上[聞名],我也不知怎樣說,很[有名氣]的,可能那一刻會特別有歸屬感,[...],我作為香港人都挺厲害,雖然是別人厲害,不是我厲害,但是也有種這樣的感覺。(Interviewee 053, December 13, 2023)

Figure 3

Events that Enhance Students' sense of Belonging to the City



### Suggestions for Enhancing City Belonging

Promote City's Culture and History to Cultivate Pride and Connectedness. By deepening their understanding of the city's development and history, individuals can gain a greater appreciation for the city's unique identity and heritage, which can foster a sense of belonging and attachment to the city.

可以嘗試更加深入地去了解這個城市的發展、歷史,那你就會了解更多,從而增加了歸屬感。(Interviewee 008, November 19, 2023)

For example, Hong Kong is famous for its cuisine, architecture, and natural landmarks, learning and knowing about these help students develop a sense of Hong Kong identity and pride towards the city.

[城市]有些方面比較有名的,然後[市]民會覺得自豪。(Interviewee 084, December 23, 2023)

According to a student, organizing events and activities that promotes an understanding of a city's history may be an effective way to enhance students' sense of city belonging. By providing opportunities for students to learn about the city's past and its cultural heritage, students develop a greater appreciation for the city and its unique characteristics, fostering a sense of pride and connectedness to the city.

我覺得例如舉辦一些活動去讓我們更加明白這個城市的歷史,即是如果你明白個城市的故事,通常你都會對它有更加多的歸屬感,因為你知道你自己身處的地方的過去,亦身同感受,亦在這個地方感受著它的故事,我覺得這樣能增強歸屬感,例如有些展覽、博物館,即是有些展覽,或者會舉辦一些互動性的活動。(Interviewee 021, December 11, 2023)

Facilitate Communications through Activities to Build up the Relationships among
Residents. As cities can be very large and diverse, it can be challenging for individuals to connect
to all different parts and aspects of the city. However, by promoting social interactions and creating
opportunities for individuals to meet and communicate with one another, students can develop a
greater sense of city belonging.

我認為是人與人之間的交流。因為這個城市很大,你不一定能接觸很多不同的東西,人你是一定可以接觸到,如果某個地方的人對你很好,[...],你感受到這個地方好的時候就會對它產生一些不同的感受。(Interviewee 080, December 15, 2023)。

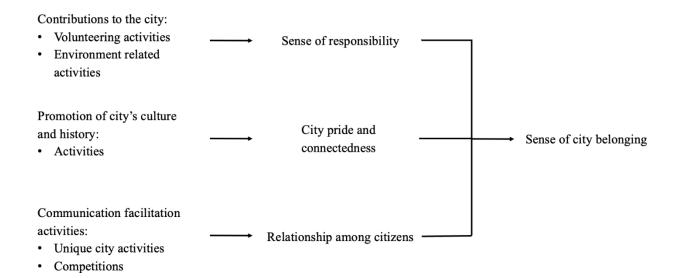
可能舉辦一些只有香港這個城市有的活動,或者比賽,或者溝通。,[...],可能每方之間談談笑笑,或者看看香港發生了甚麼有趣的事,[...],開心的討論,讓大家的關係變得更親近,更親近的就好像一個家那樣,一個家庭那樣,就會有歸屬感。(Interviewee 060, December 12, 2023)

Encourage Students' Contribute to the City to Develop Their Sense of Responsibility. Specifically, participating in volunteer activities is an effective way for students to develop a sense of responsibility towards their city. By volunteering their time and effort to support local organizations or events, students reported that they could gain a greater appreciation for the needs and challenges facing their city. Engaging in volunteer activities can also provide students with a sense of fulfillment and accomplishment, as they see the tangible results of their efforts. As an interviewee mentioned, participating in volunteer activities could make students feel that they are making a positive contribution to their city and community, which could foster a sense of pride and connection to their surroundings (see Figure 4 for more details).

参加一些義工活動,我参加義工活動的時候,我會[覺得]我在為這個城市付出一分力。(Interviewee 063, December 14, 2023)
可能對城市作一些貢獻,例如做環保那些、義工那類,給人一種很溫暖的感覺,就覺得他們也是城市的一份子,這樣一直傳遞下去。(Interviewee 062,

December 23, 2023)

Figure 4
Suggestions to Enhance Students' sense of Belonging to the City



### National Belonging

Recognition of the Country's Culture and History Enhance Connectedness, Leading to National Belonging. History reflected the struggles, triumphs, and significant events that shaped the country and its people. Exploring and learning about the history of a nation allows individuals to grasp the journey that their ancestors had undertaken, the challenges they overcame, and the progress they made. Understanding a country's history could deepen students' sense of connection to the country, thereby enhancing their sense of national belonging.

有時歷史是一個除了自己的過去,也是整個民族的過去,自然都會想了解更多。然後這樣的話能加強[的歸屬感]。(Interviewee 084, December 23, 2023)

One interviewee reported that during the Chinese history classes, the teacher discussed various aspects of Chinese history that left a deep impression on the students.

中國歷史堂時老師講解一些關於中國歷史裡面提及到的東西,可能有些是對我自己特別印象深刻。(Interviewee 018, December 16, 2023)

The student reported that despite their family members all being Chinese, they did not know much about the country. However, after traveling around the country, they were able to see many

differences between the two regions while also recognizing similarities in people's lifestyles and habits. Such a travelling experience helped them feel a stronger connection to their country.

與我的爸爸媽媽出去旅行,即是國內旅行的時候,即是看到可能內地的文化其 實跟香港的文化差別有點大,不單單是香港的,就會對國家的歸屬感更強。因 為本來爸爸媽媽都是中國人,即是對這個文化本身有一些刻板的記憶。

[...],去了旅遊以後,就看到各方面很不同的東西。可能每個人他們的生活方式、生活習慣其實就有很多相類似的地方,但也會有一點不同,就會對這個國家有一種歸屬感。(Interviewee 071, December 20, 2023)

The Country's Achievements Promote National Pride, Leading to National Belonging. When a country achieves something significant, people from different parts of the country come together to celebrate, and this creates a sense of unity and shared identity. It makes students feel proud to be a part of the country, and they feel a sense of connection with others who share the same pride.

可能有時候拿到一些國際性的獎項,整個國家不同地方的人會稱讚,也覺得自己很有成就,好像別人都很像我一樣,會覺得你也是國家的一分子。
(Interviewee 062, December 23, 2023)

Specifically, the interviewee perceived pride and belonging to China when they witnessed the recent rocket launch. They felt proud that they lived in a country capable of such impressive technological achievements. This experience helped them feel a stronger connection to the country and increased their sense of national pride and belonging.

前段時間火箭升空就覺得很自豪,即是覺得自己生活在一個很厲害的國家。 (Interviewee 080, December 15, 2023)

Additionally, advancements in the construction of a space station fostered students' national pride and enhanced their sense of belonging to the nation. Students felt pride in the country's

accomplishments and acknowledged the positive impact that these technological advancements to society.

例如中國城市建造太空站,我會覺得中國的科技發展而去到好的地步,就研發了科技就可能造福人,那麼我就會在當下比較喜歡中國,對中國產生好感,認為自己成為那個國的一份子,我會有自豪。(Interviewee 065, December 23, 2023)

National Security Promotes Sense of Security, Leading to National Belonging. A student said that when they were bullied or harassed, they relied on the support of the country's legal system or law enforcement agencies to assist them. Similarly, when they travelled abroad, they felt a sense of security knowing that their country's embassy or consulate could aid in case of emergencies. This reinforced students' sense of belonging to their country and helped them feel more secure and protected as a member of the country.

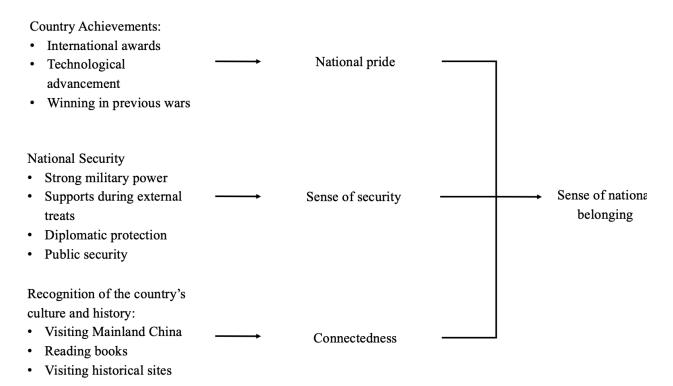
其實很多時刻[感到有歸屬感],[...],例如我被人欺負,國家、警察、或者其他都會有法律條例幫助我。或者我出去旅遊,遇到危險,國家大使館會派人來解決。(Interviewee 114, December 24, 2023)

It is also worth noting that during the pandemic, many students felt an improved sense of belonging to their country. This was because the government provided various forms of support, such as ensuring an adequate supply of masks, which was not the case in other countries where people had to scramble to obtain them. This reinforced students' sense of connection to their country and promoted a feeling of security during challenging times (see Figure 5 for more details).

我覺得疫情的時候都算是歸屬感較強。因為國家提供了很多東西, [...], 就有各種的口罩,沒有好像其他國家那樣,連檢測包也要搶購、爭奪那種。就好像後面有個後台那樣,背後有一個家,不停地供應補給品,供應人手,幫助自己、及這個城市。(Interviewee 060, December 12, 2023)

Figure 5

Events that Enhance Students' sense of Belonging to the Country



### Suggestions for Enhancing National Belonging

Promote Chinese Culture and History to Enhance Pride and Connectedness. To enhance national belonging, it is essential to promote Chinese culture and history among students to help them develop a sense of pride and connection to their country. This can be achieved through various activities that introduce the country's culture and history to its residents. For example, museums and cultural centers can organize exhibits showcasing the country's rich cultural heritage, from ancient artifacts to contemporary art. Historical sites and landmarks can also be preserved and promoted to highlight the country's significant contributions to world history. Additionally, events such as cultural festivals and performances can help students appreciate the diversity and richness of the country's cultural traditions. By promoting a country's culture and history, students can develop a stronger sense of pride and connectedness to their country.

如果他們真的要提升他們對國家的歸屬感,[...],就是要有些不同的活動去介紹國家,以及它的歷史。(Interviewee 018, December 16, 2023)

[多舉辦]活動是關於國家問題,因為國家都有很多地區,而每個地區都有不同的當地特色文化。 [...] ,因為國家都有很多不同地方有它的特色和發展,所以你加深了知識以後,就對國家歸屬感會更大。(Interviewee 013, November 19, 2023)

Understanding both positive and negative aspects of national history help students gain a comprehensive understanding of their country's past and present, leading to a greater sense of national belonging. Additionally, by using various media platforms such as Instagram, Xiaohongshu, Tiktok, and Facebook, short videos can be produced to showcase China's history and culture in an engaging and accessible way. These videos cover a wide range of topics, including China's contributions to science and technology, its art and literature, and its struggles and achievements throughout history. By watching these short videos, students become more interested in their country and more responsible for its future.

宣傳歷史那些方面,以及他們做過的一些好的方面和不好的方面,拿出來講,讓[市民]知道,以及[之後]國家應該怎樣做才對。[...] ,拍攝短片[宣傳]會比較有效,因為現在大部分的年輕人都會用 Instagram、小紅書、Tiktok 和 Facebook 這些。 (Interviewee 114, December 24, 2023)

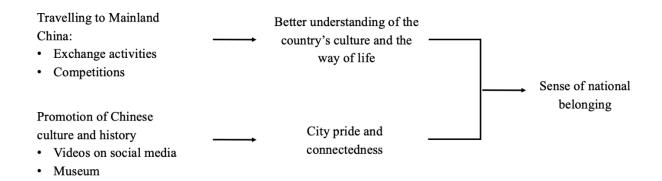
Travel to Mainland China to Better Understands the Country's Culture and the Way of Life. Traveling to Mainland China and staying there for an extended period can be an effective way to enhance students' understanding of the Chinese culture and way of life. By immersing themselves in the local environment, students can gain a deep appreciation for the local customs, traditions, and way of life. This can help them develop a stronger sense of connection and belonging to the country.

我建議可以去那邊住一段時間,就是去不同的城市不同的國家去居住一段時間,你就會非常了解那個地方,就會有歸屬感,因為曾經是那裡的一份子。
(Interviewee 008, November 19, 2023)

Encouraging cultural exchange between Hong Kong and Mainland China can be a great way to promote mutual understanding and enhance national belonging, which can be achieved through various activities, including organizing cultural exchange programs, competitions, and events that bring people together from both regions (see Figure 6 for more details).

可以與內地交流一些比賽或者有些香港人去內地,內地[人]去香港。[...],可以了解當地的文化。(Interviewee 031, December 9, 2023)

Figure 6
Suggestions to Enhance Students' sense of Belonging to the Country



#### World Belonging

Worldwide Activities Enhance Students' Sense of Involvement, Leading to Global Belonging. An Interviewee reported that celebrating world events and participating in global sporting events brought students from different parts of the world together and provided opportunities for students to connect with individuals from different cultures and backgrounds, leading to a greater appreciation of diversity and a sense of connection to the world.

我覺得是一起慶祝一些世界性的事,好像新年大家一起倒數,雖然時差這些問題就另外算,但是一起慶祝一些節日,或者一齊去看一些比賽,好像現在的世界杯,可能之後的奧運[會],這些都可以。一齊做的時候,就覺得大家都是連接在一起。(Interviewee 060, December 12, 2023)

Recognition of Global Issues Build Up Sense of Responsibility, Leading to World Belonging. As students reported, when they became aware of the impact that global issues such as climate change, poverty, and inequality had on their own lives and those around them, they were more likely to feel a sense of responsibility towards addressing these issues.

當我意識到一些全球性的問題,例如全球暖化等這些問題是會影響到我和我身 邊的人的時候,我就會有[歸屬感]。(Interviewee 021, December 11, 2023)

Furthermore, students reported that the COVID-19 pandemic was a prime example of a global issue that highlighted the interconnectedness of our world and the importance of working together to address common challenges. As the pandemic spread across the globe, it became clear that everyone had a responsibility to take action to slow the spread of the virus and protect public health. This shared responsibility created a sense of unity and belonging among our students, as they recognize that they were part of a global community working towards a common goal.

[當]疫情成為了全球問題的時候,我就覺得全球的人都有義務去壓住這個疫情 擴散,保障全人類的健康。(Interviewee 063, December 14, 2023)

Understanding of Problems in Other Countries Develop Sympathy, Leading to World Belonging. Recognizing the challenges faced by people in other countries and taking action to support them help students to experience a sense of sympathy, yielding stronger global belonging. By acknowledging the differences between our own circumstances and those of others around the world, students tend to develop a greater sense of empathy and connection to the world.

有災難或者[看到]貧窮[問題]的時候,就覺得自己生活在香港稱得上是比較幸福,可能就有更多歸屬感,我們應該捐款。(Interviewee 092, December 15, 2023)

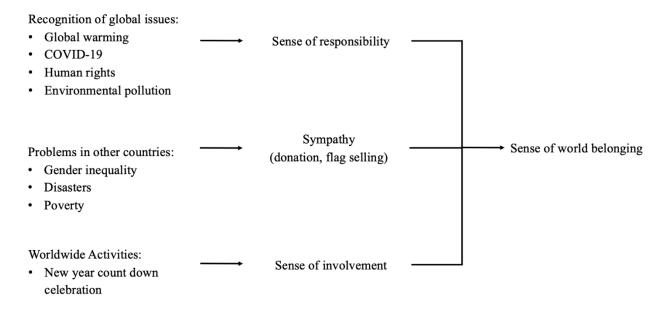
One of our interviewees noted the restrictions and injustices faced by women in other countries, she felt a strong sense of connection to these women and a desire to support their efforts

to achieve equality, leading to her stronger sense of responsibility and global belonging (see Figure 7 for more details).

在面對其他國家對女性不公平的時候,例如在某些地方女性需要包頭、包面, 出外時不可以被人看見你的樣子,這些不公平不應該出現,因為人與人之間是 平等的,不論是男或女,其實都是應該有相同的權利。(Interviewee 080, December 15, 2023)

Figure 7

Events that Enhance Students' sense of Belonging to the World



### Suggestions for Enhancing World Belonging

Activities that Enhance Relationships among People around the World. Global events such as sports competitions, cultural festivals, and international conferences are effective ways to enhance relationships among people around the world. These events provide a shared experience and a common topic of conversation that can bring students from different cultures and backgrounds together.

可能有時候一些比賽,好像冬奧,或者世界杯的時候,就算你不認識我、我不 認識你也好,自然就會在一起討論一下,好像現在世界杯那樣,很自然,就算 你不認識我也好,都可以談談那隊進了球、那隊勝出了。(Interviewee 113, December 21, 2023)

Be Awareness of Global Issues. When students learn about the challenges in different parts of the world, they develop sympathy and a sense of connection with the world. Organizations should conduct more fundraising activities or set up booths at local fairs and markets to introduce the current global issues because most of students did not actively seek out information on global issues.

大[型]的機構,[例如]無國界,進行更多籌款活動,或者可能擺設攤位、市集,介紹一下這個世界正在發生什麼事,因為人們都是不看的。(Interviewee 092, December 15, 2023)

Additionally, an interviewee mentioned that it is important to create opportunities for students to connect with and support less fortunate individuals and animals in our world. Volunteer work and community services are effective means to attract people to enhance global belonging.

Groups can be organized to clean up local parks, animal shelters, food banks, and community centres. By providing students with the ways that they can contribute to their community, they are more likely to feel connected to others and to the world at large.

可以宣傳我們這個世界不止我們,有些不幸福的人或者動物。[...],那些活動可以開在廣場裡,[...],令別人覺得有吸引力。(Interviewee 031, December 9, 2023)

Documentaries or other videos can be used to educate students about the disasters and issues occurring in the world to enhance their global belonging. Through these videos, students can gain a deeper understanding of the challenges faced by people and animals in different parts of the world, and the impact of these challenges on the global community.

其實我覺得影片會比較實際,就是現在互聯網的影響力很大。[...],[內容是]有時會發生的災難,或者是關於這個世界上的問題等等。(Interviewee 037, December 3, 2023)

Schools can organize various activities and lectures that promote a sense of cultural diversity and responsibility towards the world. These activities can include International Day events, Global Issues Seminars, Community Service Projects, Model United Nations conferences, and Cultural Exchange Programs. By participating in these activities, students can gain a deeper understanding of the challenges facing the world and develop empathy and compassion towards those affected by them. They can also develop critical thinking, problem-solving, and cross-cultural communication skills, which are important skills for global citizenship.

可以擺在[課堂上],再舉辦那些活動、講座。(Interviewee 040, December 3, 2023)

Reading about extreme weather events caused by climate change may help students pay more attention to the global impact of climate change and the need for collective action to address this issue. It also inspires students to act towards reducing their carbon footprint and promoting sustainable practices in their community.

可能寫一篇閱讀報告關於一些近來發生了的事。(Interviewee 063, December 14, 2023)

Organize Experiential Activities to Develop Sympathy and Connectedness. Experiential activities can help individuals develop a greater sense of empathy, understanding, and connectedness by providing opportunities to explore different perspectives and cultures. These activities can promote a more inclusive and compassionate society, where individuals feel a sense of belonging to a larger global community.

我認為有些事情是要自己親身經歷過之後才會感受到那時候的人有甚麼感受, 所以我覺得會不會有些活動是角色扮演,可能就是讓你嘗試下,或者是開博物 館擺放不同國家的東西,可以讓我親身去感受這些東西,這樣會令我感受更深。(Interviewee 080, December 15, 2023)

School or community centres can host cultural festivals that showcase the traditions and customs of various countries. This could include performances of traditional music and dance, displays of traditional clothing and artifacts, and food tastings of traditional cuisine. By experiencing the traditions of other cultures, students can gain a deeper appreciation and understanding of the diversity and richness of the world. This can help break down stereotypes and promote a sense of global unity and belonging.

增加國家或者這個民族之間的交流,[...],文化上的交流。[...],我覺得其中 一個可以入手,比較容易入手的是節日方面。[例如]在自己的國家嘗試舉辦其 他國家的傳統活動。(Interviewee 084, December 23, 2023)

Traveling is a valuable way to enhance global belonging and promote understanding and respect for different cultures. It allows students to step out of their comfort zone and foster personal growth and development by exposing individuals to new perspectives and ways of thinking. This can lead to a greater appreciation for diversity.

可能以旅遊去明白那個地方的文化,嘗試以一個本地人的身份去體會他們的生活,這樣都可以以這一種形式去,讓他們設身處地去明白。(Interviewee 021, December 11, 2023)

As a student reported, making friends across different countries or regions and learning about their cultures were valuable ways to enhance their global belonging and promote understanding and respect for diversity. This can be achieved through various initiatives such as student exchange programs or even online language exchange programs.

就是可能大家可以嘗試跟其他國家或者地區的人交朋友,互相了解自己或者其他人的文化。(Interviewee 012, November 19, 2023)

Cultivate Students' Sense of Civic Responsibility. By understanding how their actions affect the world around them, students can develop a greater sense of responsibility towards creating a more sustainable and environmentally friendly world. One effective way to educate students about the environment is through hands-on learning experiences, such as field trips to local parks or nature reserves. These experiences can help students connect with nature and understand the importance of preserving natural habitats and ecosystems. Schools can also organize environmental awareness campaigns, such as recycling drives or tree-planting initiatives. These activities can help students understand the impact of their actions on the environment to cultivate a sense of civic responsibility and inspire them to become responsible global citizens.

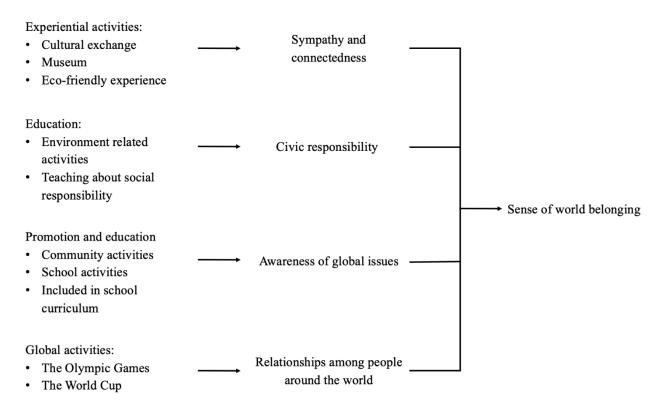
在教育上了解到環境是受到我們的破壞,然後明白到自己如果不出一分力,我自己不出一分力,別人也不出一分力,地球很快就會[毀了]。明白到自己都需要付出點力量。(Interviewee 066, December 24, 2023)

It is important to correct students' thinking and help them understand that being a responsible global citizen involves taking individual social responsibility, rather than solely relying on the government to manage social issues. Schools can organize community service projects, such as volunteering at local organizations or participating in environmental clean-up campaigns, which help students understand the impact of their own actions on their community and develop a sense of social and global responsibility (see Figure 8 for more details).

即是有個活動令他們知道全球公民應該做的社會責任,要清楚這一點,而不是 他們每個人都在覺得:「那些都不關我的事,那些都應該[由]國家管理」。 (Interviewee 114, December 24, 2023)

Figure 8

Suggestions to Enhance Students' sense of Belonging to the World



#### **Discussion**

The study conducted an extensive examination of the sense of belonging among Hong Kong adolescent students in relation to their school, city, country, and the world. It was discovered that, on average, students reported moderately high levels of belonging across levels. The results from the Time 1 survey indicated that students felt the strongest sense of belonging towards their city, followed by their school, the world, and the country. In the Time 2 survey, students continued to report the highest level of belonging towards their city, followed by the world, the country, and their school. The levels of belonging fell within the range of "neutral" to "agree," suggesting some positive outcomes while also highlighting the potential for significant improvement.

#### **A List of Policy Priorities**

Based on advanced data analysis, our results have clearly indicated a list of strong predictors for promoting students' senses of belonging towards the school, city, country, and the world.

For promoting **school belonging**, policy priorities include:

- 1. Enhancing school diversity.
- 2. Fostering respect within the school community.
- 3. Nurturing students' appreciation for school culture and history.
- 4. Prioritizing school safety.

#### For promoting **city belonging**, policy priorities include:

- 1. Promoting the use of Cantonese at home, in schools, and throughout the city.
- 2. Fostering an appreciation for Hong Kong's diversity, respect, and safety.
- Encouraging students to engage in social interactions with individuals in their local community.
- 4. Cultivating students' appreciation for Hong Kong's culture and history.

### For promoting **national belonging**, policy priories include:

- 1. Enhancing students' perceptions of the country's safety, diversity, and respect.
- 2. Fostering students' appreciation for Chinese culture and language (i.e., mandarin).
- 3. Strengthening students' social interactions with people in the country.

#### For promoting **global belonging**, policy priories include:

- 1. Fostering students' perception of respect and diversity on a global scale.
- 2. Promoting students' social interactions with individuals in their community.
- 3. Promoting students' values about the Chinese language in the world.

In the following sections, we will elaborate the policy recommendations, integrating the results we have found in the quantitative and qualitative parts of the study. Additionally, we have outlined specific policy priorities accompanied by examples.

#### **Suggestions for Promoting School Belonging**

# Priority 1: Enhancing School Diversity

The augmentation of diversity within schools can cultivate inclusivity, allowing students from multifarious backgrounds to experience representation and value. Educational policymakers could contemplate the implementation of policies fostering diversity in student admissions, thereby

facilitating equitable representation of students from diverse ethnic, socioeconomic, and cultural backgrounds. Moreover, celebration of the cultural diversity present within schools, through the incorporation of multicultural days or diversity workshops (many examples of such multicultural activities can be found at Hong Kong schools and their online resources, such as the <u>Delia English Primary School & Kindergarten</u>, <u>ESF Island School</u>, and <u>Korean International School</u>).

Furthermore, ensuring the inclusion of a wide array of perspectives and histories within the school curriculum may also aid in fostering respect and understanding for differing cultures.

In addition, findings from the student interviews also suggested that enhancing school diversity could also be facilitated through classroom discussions, school-wide events, and student-led activities, which can help students perceive their school as open and diverse. Such an environment can significantly enhance their sense of belonging and identification with their school (an exemplary list of such activities can be found <a href="here">here</a> at ISF Academy).

# Priority 2: Fostering Respect within the School Community

Respect is integral to the establishment of a sense of belonging within educational environments. Policies emphasizing respect could encompass the integration of character education programs, with an emphasis on empathy, kindness, and mutual respect (e.g., Bates, 2019; Birhan et al., 2021; Lavy, 2020). Policymakers could also consider the mandatory inclusion of lessons cantered on social-emotional learning (e.g., Blewitt et al., 2018; Durlak et al., 2022; Taylor et al., 2017; Wigelsworth et al., 2016), focusing on the comprehension and management of emotions (Hoffmann et al., 2020), the establishment and accomplishment of positive goals, empathy, and the maintenance of positive relationships (Cheang et al., 2019). Additionally, the organization of regular assemblies or workshops advocating respectful behaviours and discouraging bullying and discrimination should also be considered (Gaffney et al., 2021; an example about social-emotional learning programs for students may be found here at the Canadian International School of Hong Kong).

Moreover, results from our student interviews also suggested that creating a fun, engaging learning environment can also enhance students' positive emotions and involvement in school life. This can be achieved by offering enjoyable activities such as Christmas parties, class activities, and various celebration events (e.g., Chinese New Year) to foster a sense of community and belonging. Additionally, building positive and supportive teacher-student relationships is crucial. Schools can facilitate this by organizing teacher-student gatherings and activities such as field trips, sports events, or cultural celebrations. Teachers demonstrating interest and care in their students' lives outside of school can also further foster this respect and sense of community.

# Priority 3: Nurturing Students' Appreciation for School Culture and History

Promoting an appreciation of the school's culture and history can significantly enhance students' sense of school belonging. Policymakers might advocate for schools to host events celebrating the school's history and traditions, such as an annual Founder's Day (e.g., Deal & Peterson, 2009; an example about Founders Day may be found <a href="https://example.com/here">here</a> at Yew Chung International School of Hong Kong). The integration of the school's history and culture into the curriculum may also provide students with knowledge about the school's founders, significant historical events, and the evolution of the school over time. This can cultivate pride and contribute to students feeling part of the school's ongoing development and narrative. In addition, from our students interviews, we also recognized that encouraging students to participate in curriculum and co-curriculum activities to strengthen their connection and interaction with the school might also serve as an effective way to promote school belonging. For instance, curriculum activities such as class discussions (e.g., on well-being, technology, volunteerism, school's sustainability), group projects, and field trips can provide opportunities for students to meaningfully engage with the school's culture.

# Priority 4: Prioritizing School Safety

Ensuring safety is a fundamental prerequisite for the cultivation of a sense of belonging within schools. Policymakers could facilitate this through the establishment of policies promoting physical and emotional safety at school (Lewallen et al., 2015). This could encompass policies

ensuring a secure campus through controlled access to school buildings, surveillance cameras, and regular safety drills. Emotional safety could be fostered through policies discouraging bullying and discrimination, providing mental health support at school, and fostering a supportive and inclusive school climate (Darling-Hammond & Cook-Harvey, 2018; Kutsyuruba et al., 2015). For example, the implementation of a zero-tolerance policy towards bullying, provision of counselling services, and teacher training to recognize and address signs of emotional distress in students could be considered (an example of child protection and safeguarding policy can be found here at the Harrow International School of Hong Kong).

### **Suggestions for Promoting City Belonging**

#### Priority 1: Promoting the Use of Cantonese

Utilizing Cantonese in Hong Kong may seem straightforward, but in the face of globalization and an influx of new immigrants from mainland China and other countries, maintaining the use of Cantonese has become more challenging than ever. Our research findings clearly suggest that promoting the use of Cantonese, particularly in the home environment with parents, is the most effective strategy for fostering students' sense of belonging to the city.

Furthermore, our study revealed that students born in mainland China reported lower levels of city belonging compared to those born in Hong Kong. These results warrant policy attention, as the relaxation of our immigration policy and the increasing number of non-Cantonese speakers and their families immigrating to Hong Kong pose the risk of diminishing city belonging among our secondary school students. In light of this, promoting the local language/dialect has become more crucial and urgent than ever before.

Immigration policies could consider incorporating Cantonese as a criterion, encouraging individuals who already possess Cantonese language skills to immigrate or introducing an additional Cantonese knowledge test as part of the immigration application process. Such policies would motivate potential immigrants to begin learning Cantonese even before relocating, enabling

them to more easily find employment, establish new friendships, and ultimately develop a sense of belonging upon arrival.

### Priority 2: Fostering an Appreciation for Hong Kong's Diversity, Respect, and Safety

Volunteer work, community service projects, and cultural festivals can provide students with opportunities to engage with the community, develop empathy, and gain a deeper understanding of the city's needs and challenges (e.g., Khasanzyanova, 2017; Scott & Graham, 2015). Policymakers should support initiatives that facilitate student participation in these activities and provide resources to ensure their success.

In addition, policymakers should also advocate for inclusive policies that promote respect and appreciation for different cultures and backgrounds in the city. Offering multi-language courses, organizing cultural celebrations, and implementing exchange programs can expose students to diverse perspectives and promote cultural understanding (e.g., Cummins, 2015; Rincón-Gallardo, 2016). Policymakers could also allocate resources to support these initiatives and encourage schools to adopt inclusive practices that celebrate diversity in the city.

#### Priority 3: Encouraging Social Interactions with Individuals in the Local Community

Schools could organize community service programs, internships, or field trips that provide students with opportunities to interact with different members of the local community. This could include visits to local businesses, participation in community events, or volunteering at local charities (e.g., Epstein et al., 2018). Government policies could also support programs that facilitate interactions between students and the community, where students can voice their opinions and concerns. Our existing programs such as the *Member Self-recommendation Scheme for Youth* might be a good example for such similar policies).

### Priority 4: Cultivating an Appreciation for Hong Kong's Culture and History

Schools could incorporate more local history and culture into their curriculum. This could be done through field trips to historical sites in Hong Kong, lessons on significant events in Hong Kong's history, and cultural activities such as traditional music, painting, or dance classes. The

government could also contribute by organizing city-wide cultural events or festivals (e.g., New Year Countdown celebrations; fireworks), establishing museums or cultural centres (e.g., Hong Kong Science Museum, Hong Kong Museum of Art), and preserving historical sites (such as the resources available <a href="here">here</a> at Commissioner for Heritage's Office). Policies could be enacted to ensure that significant cultural and historical aspects of Hong Kong are taught in schools, fostering a deeper connection and sense of belonging among students towards their city (e.g., Grossman & Portilla, 2022).

#### **Suggestions for Promoting National Belonging**

### Priority 1: Enhancing Students' Perceptions of the Country's Safety, Diversity, and Respect

Policymakers and schools can consider incorporating national culture into the curriculum, providing opportunities for experiential learning such as museum visits, cultural activities, and field trips. These experiences deepen students' understanding and appreciation of their country's cultural heritage, fostering a stronger sense of national belonging (an exemplary curriculum and a series of learning goals can be found <a href="here">here</a> at Chiu Cheung School Hong Kong).

Moreover, creating a safe and supportive learning environment is also crucial in cultivating students' warmth and care for the country. This can be achieved by promoting respect for diversity and encouraging the use of Chinese social media platforms (such as WeChat, Weibo, and Xiaohongshu) to expose students to various opinions and ways of life among other residents. By embracing the country's multifaceted culture and society, schools and policymakers can create a welcoming and inclusive environment that nurtures students' sense of belonging and attachment to their country.

#### Priority 2: Fostering Students' Appreciation for Chinese Culture and Language

Another key aspect in promoting national belonging is fostering students' appreciation for Chinese culture and language, particularly Mandarin. Policymakers and schools can prioritize initiatives that expose students to Chinese traditions, customs, and language. This can be accomplished through cultural events, language classes, and exchange programs that provide

students with opportunities to immerse themselves in the richness of Chinese culture, language, and history (a list of such celebrations and school activities can be found here at St. Paul's Convent School; the *Funding Scheme for Youth Internship in the Mainland* and the *Thematic Youth Internship Program to the Mainland* might also be good examples of such educational policies). By nurturing their understanding and connection to Chinese culture, language, and heritage, students develop a deeper sense of national belonging.

Furthermore, incorporating Mandarin language learning into the curriculum is also crucial. Policymakers and schools should allocate resources to provide quality Mandarin language education, ensuring that students have the necessary skills to communicate and engage with Chinese-speaking communities. By equipping students with Mandarin proficiency, they can actively participate in the country's various cultural or sports activities (e.g., summer camps, sports competitions, academic competitions), further strengthening their sense of national belonging.

# Priority 3: Strengthening Students' Social Interactions with People in the Country

Strengthening students' social interactions with people in the country is a vital component of promoting national belonging (van Vemde et al., 2021). Policymakers and schools should encourage students to engage in a wide range of activities related to the country, including study tours, cultural exchange programs, and volunteer activities in China (e.g., here is an example of volunteer activities in China; the organization provides volunteer opportunities including cultural activities and Chinese classes, which serve as great opportunities for promoting national belonging). These opportunities enable students to gain a deeper understanding of the country's social, cultural, and economic characteristics, while also fostering closer relationships with its residents (an example of a Mainland Exchange Program can be found here at the Ho Sau Ki School).

By providing ample opportunities for students to interact with people from diverse backgrounds within the country, schools and policymakers facilitate the development of meaningful connections and a sense of belonging (Cummins, 2015; Rincón-Gallardo, 2016). Encouraging students to actively participate in community service and volunteer initiatives further deepens their

engagement and commitment to the country. Teachers and schools should offer students a wide range of options, allowing them the freedom to select activities that align with their personal interests and hold significant meaning in their lives. For instance, students could have the opportunity to visit elderly centres, lead activities for students with special educational needs, or take care of younger children; for example, a list of organizations offering volunteer opportunities and charity work in Hong Kong can be found <a href="here">here</a> at the HK Hub). It is also important to note here that we did not find in our study that city belonging to be conflicting with national belonging (contrary to Veg's study [2017]; instead, they were compatible. Therefore, improving students' belonging to Hong Kong can also serve as an effective strategy to promote their belonging to the country.

### **Suggestions for Promoting Global Belonging**

### Priority 1: Fostering Students' Perception of Respect and Diversity on a Global Scale

Various measures can be taken to enhance students' global belonging by promoting their appreciation of respect and diversity. This can be achieved by providing resources and opportunities for self-directed learning about global issues and challenges (such as global warming and recent wars). Schools can empower students to take charge of their own learning and develop the skills they need to make meaningful contributions to their communities and the world at large. Effective self-directed learning includes creating a conducive learning environment, comfortable learning facilities, and resources, as well as promoting independent learning projects and research-oriented learning (e.g., project based learning about the challenges related to global warming; an example can be found here at PBLWorks). Strengthening international exchange programs, attending international academic conferences, and increasing cross-cultural education courses can also foster a multicultural environment that promotes students' global awareness and understanding (an example of such a cultural activity can be found in here at HK International Cultural Summit).

### Priority 2: Promoting Students' Social Interactions with Individuals in their Community

To enhance students' global belonging, it is important to provide a variety of activities outside of the classroom that promote social interactions with individuals in their community. Field trips to historical sites, participation in community service projects, and engagement in cultural exchange activities in Hong Kong and abroad can provide valuable opportunities for students to learn and interact with people from diverse backgrounds. These activities are essential for building empathy, understanding, and a sense of global belonging (one example can be found <a href="here">here</a> With the Thematic Youth Internship Programmes to the Mainland).

### Priority 3: Promoting Students' Values about the Chinese Language in the World

Promoting students' appreciation of the Chinese language can also enhance their global belonging. Chinese education should be valued by providing Chinese reading materials and organizing Chinese cultural experience activities. Such activities help students better understand the Chinese culture and characteristics, as well as appreciate how important their country/culture is as an integral part of the world. This, in turn, yields a stronger sense of students' global belonging (an example can be found <a href="here">here</a> at Tai Po Methodist Kindergarten and the school's online resources). Furthermore, it is crucial to acknowledge that promoting Chinese culture does not conflict with fostering a sense of global belonging, as revealed by our study. Students should be educated about the significance of their Chinese culture and language to find the right path towards developing a sense of global belonging. Without recognizing their own culture and language, they may struggle to form a unique identity and understand their place in the world, let alone cultivate a sense of belonging.

#### **Policy Review and Reflection**

The present study highlights the importance of taking a comprehensive approach to fostering students' sense of belonging at multiple levels, including their school, city, country, and the world. This can be achieved by addressing various individual and contextual factors. Our research revealed that students' values towards their school, city, and country's culture and history play a crucial role

as individual factors. In terms of contextual factors, students' perception of environmental respect, diversity, and safety emerged as the most influential.

Based on these findings and the prioritized list of policy recommendations, we have developed and summarized specific policy reflections. Furthermore, we have integrated both quantitative and qualitative aspects of our study to formulate policy recommendations using seven Chinese sayings.

# Policy Reflection #1: "一石二鳥"

It is observed in the present study that the four levels of belonging—school, city, country, and the world—are positively correlated with each other, suggesting that improving one aspect of belonging might also increase the other types. That is to say, a single policy should target the promotion of multiple levels of belonging simultaneously. For example, cultivating a positive emotional climate at school through the organization of regular sports, music, and art activities, may promote students' senses of belonging at the school, city, and global levels. Similarly, emphasizing the importance of cultural and historical learning can improve students' sense of belonging at all four levels. While designing activities to promote the recognition of school culture and history, schools may also successfully promote students' senses of belonging to their city, country, and world, as these belonging types are all positively related to each other.

Hence, educational policies such as the *Scheme on Corporate Summer Internship in the Mainland and Overseas*, which provides internships for Hong Kong students, or the *Youth Ambassador Program*, which encourages youth to serve the Hong Kong community, should aim to not only facilitate young people's sense of belonging to their local community but also effectively promote their sense of belonging to their city, nation, and the global community.

Another noteworthy example is the establishment of a safe, respectful, and diverse environment, as it has the potential to enhance students' feelings of belonging across all four levels. Therefore, it is crucial for schools to make every effort to implement clear policies and procedures

aimed at preventing bullying, discrimination, and harassment both within and outside of school premises. By creating a welcoming atmosphere for all students, schools can actively promote diversity, inclusion, and a sense of belonging. This approach should prove to be one of the most cost-effective and efficient strategies for fostering a sense of belonging among students. When students are shielded from bullying and discrimination and receive support at school, they not only develop a fondness for their school but also cultivate a sense of attachment to their city, country, and the world they inhabit.

### Policy Reflection #2: "心想(才會)事成"

Regarding the individual and contextual factors influencing students' sense of belonging towards their school, city, country, and the world, our study identified consistent results using different analytical methods. Across all four types of belonging, we found that students' *values* were among the most influential individual factors. When students highly value their school's culture and history, they develop a strong sense of belonging to their school. Similarly, a strong value towards Hong Kong's language (Cantonese), history, and culture results in a strong sense of belonging to the city, while a strong value towards Chinese language (Mandarin), culture, and history leads to a strong sense of national belonging.

Regarding the most predictive environmental factor, our study revealed that students' perceptions of safety, diversity, and respect in their environment were the strongest indicators of their sense of belonging. These findings held true for all four types of belonging. Additionally, our analyses have compared students' perceptions of their environment quality with their actual participation in activities at school, in the city, in the country, and internationally. Our findings strongly suggest that students' perceptions of the environment could be even more important than their actual behaviours in predicting belonging. This implies that compulsory attendance of activities may not achieve its intended purpose and could potentially lead to reduced belonging. Policies should therefore focus on addressing the core aspect of developing a sense of belonging.

which is ensuring that students genuinely believe their environment is supportive, inclusive, safe, and respectful. Therefore, the *quality* is way more important than the *quantity* of the activities or policies.

Our initial assumption, based on previous literature (e.g., Hsu & Wang, 2010; Roger, 2010), was that promoting belonging could be achieved by encouraging students to participate in various activities such as school tours and trips. However, our findings indicate that this assumed link between activity participation and belonging development overlooks a critical mediator—the activation of students' own perceptions, beliefs, values, or attitudes. This activation was found to be the most predictive and proximal factor influencing students' sense of belonging across all four levels. It can be achieved through intentionally encouraging students to attend activities or trips (such as in Bamford & Pollard, 2018 or Zhang, 2017), but it can also be facilitated through costless activities such as social media interactions, conversations with friends, and daily interactions with family and neighbours. Therefore, policymakers should shift their focus from designing and mandating a large number of new activities, towards improving the quality of a smaller number of existing activities and policies, while creating a social environment that is respectful, inclusive, diverse, and safe to promote belonging to be developed across different levels. Moreover, it is also important to note that while a trip, a learning session, or an activity might prove to be effective, promoting belonging cannot solely rely on a single trip, one lesson, or an activity, but rather through series of such high-quality activities, and more importantly, the daily permeation of a warm and supportive social environment.

For example, policies such as the *Member Self-Recommendation Scheme for Youth* encourage active participation in specific government advisory committees and policy discussions to promote a sense of belonging to the city. Other policies, such as the *Funding Scheme for Youth Internship in the Mainland*, the *Thematic Youth Internship Program to the Mainland*, the *Funding Scheme for Youth Exchange in the Mainland*, the Guangdong-Hong Kong-Macao Youth Cultural Exchange Program, and the Passing on the Torch, all aim to facilitate a sense of national belonging

among youth. When assessing the effectiveness of these policies, the key lies in whether they have successfully triggered inner feelings among the youth, such as a *real* sense of responsibility for Hong Kong's development, a *real* feeling of national pride and enjoyment through participation in activities in Mainland China, or a *strong* sense of involvement during any of these activities. Merely participating to meet school requirements will not lead to the desired outcomes. As a matter of fact, the activities themselves will not directly translate into a sense of belonging, unlike the development of identity (e.g., through the issuance of a passport). Establishing a sense of belonging is a gradual process that involves the transformation and evolution of genuine feelings, attitudes, and values. Our present study has strongly supported these findings.

# Policy Reflection #3: "條條大路通羅馬"

Based on our study, particularly the qualitative analysis involving interviews with 29 students, we have discovered that there is no single effective strategy to enhance students' sense of belonging to their school, city, country, and the world. In fact, our interviewees have listed numerous strategies that they believed to be the most effective (at least for them). That is to say, once we have identified the *key* goals we aim to achieve and recognize that activating core values and beliefs within students is fundamental, there exist countless ways to accomplish these objectives (as we have presented from Figures 1-8). Although some approaches may prove more effective than others, such as incorporating relevant content into the curriculum and mandating student learning, it can be equally valid to provide students with the freedom to choose their own activities and engage in volunteer work within society. As long as we ensure that our students are really learning and acquiring knowledge through these experiences, the policies in place are already fulfilling their intended purposes.

# Policy Reflection #4: "千裡之行,始於足下" "不忘初心,方得始終"

While the predictors for school, city, and national belonging share many similarities, such as the importance of valuing the culture, history, and language of these entities, there is an exception when it comes to global belonging. Previous literature (e.g., Bamford & Pollard, 2018; Lai et al., 2018) and our intuition might suggest that students' exposure to the world, such as participating in international travel or connecting with individuals from different countries, would enhance their sense of global belonging. However, our research did not strongly support these findings. Instead, we found that to develop a strong sense of global belonging, it is crucial to focus on students' local engagement and their relationships with their immediate surroundings ("千裡之行,始於足下").

They also need to appreciate the Chinese culture and language first before they can develop a sense of global belonging. That is to say, our students first need to recognize their own identity and their unique place in the world to cultivate a sense of belonging to the world ("不忘初心,方得始終").

This is particularly relevant in Hong Kong, where our students may already experience diversity within their local communities, with people from different cultural backgrounds living together. Students may develop a sense of global belonging through interactions with their international neighbours or participation in school activities that celebrate cultural diversity. Even without going abroad, our students have ample opportunities to learn about the world and how people from different countries and ethnicities live. Therefore, by nurturing our students' interactions and relationships within their immediate community and neighbourhood, our students recognize their own identity, which help to lay a solid foundation for promoting their global belonging. This approach may prove to be more cost-effective and efficient in promoting global belonging compared to encouraging expensive international trips and exchange programs, which in our study, have been repetitively found to even conflict and compromise national belonging.

### Policy Reflection #5: "兩其相害取其輕"

The present study has revealed several conflicts that deserve attention. For example, we discovered that having close relationships and frequent interactions with individuals from other countries may have a negative impact on students' sense of national belonging (consistent with

results found in a recent study conducted by Bearce et al., 2023). Moreover, organizing courses and related activities abroad can also lead to a decrease in national belonging. Additionally, students who frequently engage with international social media platforms may report a poorer sense of national belonging. Furthermore, while self-identifying as "Chinese" promotes national belonging, being "born in Mainland China" was actually found to be negatively associated with students' city belonging.

Our study highlights the importance of students establishing their own identity within their school, community, city, and country as a precursor to developing a sense of global belonging. It is crucial for them to appreciate their own cultures, languages, and surroundings. Merely sending students to international countries and exposing them to other cultures will not automatically foster a sense of global belonging. In fact, it may even cause students to question their own identity, diminishing their sense of national belonging. However, it is important to note that these conflicting findings do not imply that students should be completely excluded from interacting with individuals from other countries, participating in international courses or activities, or engaging with international social media platforms. Instead, they imply that we should exercise more caution and pay more attention to these activities and policies.

It also suggests that there is a need to strike a balance to mitigate the negative impact of these factors on students' sense of national belonging. For example, programs such as the *United Nations Volunteers Program* and the *Funding Scheme for International Youth Exchange*, which were originally developed to encourage youth's volunteer activities and participation in international exchanges, may need to be evaluated to assess their effectiveness in promoting global belonging, and whether the successful promotion of global belonging compromises our students' national belonging. Ultimately, it is important to consider whether we should include students in these programs who solely seek to appreciate other cultures without having established a sense of belonging to their own schools, city, or country. However, further studies are needed to evaluate

these programs' effectiveness, as we did not examine them in detail and lack information on how they were conducted.

Another point to consider is the recent immigration policy, such as the *Top Talent Pass Scheme*, that has led to an influx of immigrants to Hong Kong in the past year or so. While immigrants serve as important contributors to Hong Kong's economy and labour market, from a belonging perspective, our results have clearly suggested that there might be a risk of diminished city belonging, at least among our secondary school students. In this sense, education about cultural, ethnic, and birthplace diversity becomes even more important than ever, so that the residents in Hong Kong can better welcome and embrace the influx of immigrants and their new perspectives and opinions, along with the increasing prevalence of Mandarin use in Hong Kong. Additionally, supporting these new immigrant families and their children in fostering their sense of city belonging is also critical.

### Policy Reflection #6: "一花獨放不是春,百花齊放春滿園"

Our education policy should not only focus on mainstream students but also prioritize those in minor statuses, including gender, ethnicity, and academic intakes. Numerous studies have highlighted the challenges and needs faced by these student groups (e.g., Hristova & Cekik, 2016; Veg, 2017), urging us to develop inclusive policies that address their specific concerns.

For instance, our present research has indicated that female students often perceive their schools as less safe compared to their male counterparts. This calls for policy interventions that combat school bullying and harassment, creating a safe and supportive environment for all students, especially female students. Additionally, male students were found to exhibit reluctance to participate in various activities at different scales. Policy initiatives should aim to engage and involve male students actively, encouraging their participation in school, city, national, and even global activities.

Moreover, students born in Hong Kong, compared to those born in the mainland China, have been found in our study to report higher city belonging, lower national belonging, and lower appreciations towards Chinese culture, history, and Mandarin language. Therefore, policies may need to specifically address these birth-place disparities by fostering a sense of national belonging and cultural appreciation among all students, regardless of their place of birth.

Likewise, the study revealed that students from ethnic minority backgrounds encounter various challenges, resulting in a lower sense of national belonging compared to those who identify themselves as Chinese (such findings are consistent with many previous studies; e.g., Duran et al., 2020; Faircloth & Hamm, 2005; Hristova & Cekik, 2016; Means & Pyne, 2017). Additionally, these students were less inclined to consider China and Hong Kong as safe, diverse, and respectful living environments. These findings suggest that our multicultural initiatives implemented throughout our schools, city, and country may not have fully realized their intended goals of promoting cross-cultural understanding and respect. This is evident as students from ethnic minority backgrounds continue to report a lower sense of belonging. Therefore, it is crucial for policies to persistently prioritize the establishment of an inclusive and hospitable atmosphere that values all students, regardless of their ethnic backgrounds.

Lastly, it was discovered that students enrolled in low-performing schools (e.g., Band 3 schools) express a lower sense of school belonging and national belonging in comparison to their peers attending relatively high-performing schools (Band 1 and Band 2 schools; consistent with previous research conducted by Anderman, 2003, Faircloth, 2005, and Yuan & Li, 2019). These findings highlight the necessity for additional support to bridge this educational gap. For instance, students from high-performing schools may have already established a sense of pride and belonging even before entering their schools. Consequently, activities such as annual Founders' Day celebrations might prove more effective in fostering a sense of school belonging among high-performing students. Therefore, it is imperative for policies to prioritize underprivileged, low-performing schools by allocating additional resources, implementing specialized programs, and

introducing targeted interventions to enhance academic performance and cultivate a stronger sense of belonging among these students.

In summary, our current results have clearly indicated that education policies should be designed to support and uplift students in minor or disadvantaged situations. By addressing issues such as gender disparities, birthplace diversity, ethnic diversity, and academic performance, we can create an inclusive educational environment where all students can thrive.

#### **Details of the Public Disseminations**

We have undertaken several dissemination activities thus far.

The first activity involved a conference presentation at the 13th Asian Conference on Psychology and the Behavioural Sciences in Tokyo, Japan, held in April 2023. The presentation, titled "Teachers' instructional and emotional support promotes students' school belonging: A multilevel perspective," specifically delved into the factors that contribute to students' sense of school belonging.

The second activity was an online public seminar held in July 2023, which was open to all secondary schools in Hong Kong. We have contacted all secondary schools and invited them to participate in the seminar. As a result, we had approximately 15 participants joining us for this two-hour seminar. The seminar shared the same title as our project, "Determinants of Hong Kong secondary school students' sense of belonging to school, city, country, and the world."

Thirdly, we conducted individual analyses and compiled personalized reports for our participating schools. These reports compared each school's means on all assessed constructs with the overall sample means and provided policy recommendations. Through these reports, schools gained insights into their students' current sense of belonging at different levels and could implement targeted policy improvements.

Furthermore, we have prepared a condensed version of this final report to be submitted to other organizations, including the *Education Bureau*, *Home Affairs Bureau*, and *MWYO*. We aspire

to establish further collaboration and partnership with them, with the submission of our comprehensive final report serving as the initial step towards fruitful cooperation.

Moreover, based on the comprehensive multilevel analysis results, we are currently working on developing a newsletter article that outlines the six policy reviews derived from this study. Our aim is to submit this article within the next two months. Additionally, we are crafting a manuscript based on the findings of this project, tentatively titled "Where Do I Belong? Investigating the Antecedents of Hong Kong Secondary Students' Senses of Belonging to School, City, Country, and the World." Given the numerous interesting findings in our research, we are in discussions amongst our collaborators regarding whether and how to present these findings in smaller pieces and potentially submit them as separate manuscripts.

Finally, it is important to note that the data collected in this PPR project encompasses extensive information on students' motivation, emotions, well-being, and sense of belonging. While we recognize the significance of the belonging aspect, we also acknowledge the importance of other factors such as students' emotional experiences and their interactions with teachers in enhancing the quality of education. Consequently, one of my PhD students and a Senior Research Assistant are diligently analysing a portion of the data and have drafted another manuscript titled "Unveiling the other side of faking emotions among teachers: Effects of emotional labor on teaching quality."

Based on these results, a blog article has been drafted and submitted to the British Educational Research Association. We submitted this blog article to an international platform to garner broader attention to this vital topic concerning teacher emotion regulation, student-teacher interactions, and teaching quality.

#### Conclusion

This study theoretically introduces and empirically tests a comprehensive model of belonging across levels and their antecedents. Integrating research in identity, belonging, and globalization, this study helps researchers, educators, and policymakers better understand the relations between students' senses of belonging towards their school, city, country, and the world,

as well as the conflicting and compatible determinants of belonging across multiple levels. Results from this study inform educational policy in several ways. First, results examine the status quo of Hong Kong youths living with pluralistic identities and multifaceted belonging at the school, city, country and world levels. Second, our results help review, revise, and update government and educational policies, practices, and the secondary school curriculum, thereby facilitating students' senses of belonging across levels while maintaining a dynamic balance among them. Strong, balanced levels of belonging will not only increase our youths' psychological and physiological well-being but also reduce their identity struggles, and socio-political and public health challenges.

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### Appendix A Questionnaire





:學

## 教育及人類發展學院

本研究由香港政策創新與統籌辦事處資助

# 學生問卷

中文版

第一部分				
性別:	男	女	其他	
你的年齡是?				
你的種族是?		SEC NO. 100 100 100 100 100 100 100 100 100 10		
華人	非華人,請註明	<b>]</b>		
你是否香港永久居民?	是			
	否,	你是哪個地方的	内公民?	_
你在哪裏出生?				
香港	中國內地		其他,請註明	
你在香港居住了多少年?			年	
在 <u>家中</u> ,你 <u>主要</u> 說甚麼語	言? <i>(可選多於</i> 一			
廣東話	普通話	英語	其他,請註明	
在 <u>學校</u> ,你 <u>主要</u> 說甚麼語	言?(可選多於一	一項)		
廣東話	普通話	英語	其他,請註明	
誰與你同住? (可選多)				
父親	母親	兄弟幼	姊妹祖父	祖母
外祖父	外祖母		叔伯父或舅父	姨母或姑母
家傭	其他,請註明	J		
你的 <u>父親</u> 在哪裏出生?				
香港	中國內地		其他, 請註明	
你的 <u>母親</u> 在哪裏出生?				
香港	中國內地		其他,請註明	
你父親的最高學歷是?		II. com I Politica	→-\	
中學畢業或以下			高級文憑、副學士)	<del>7.1.17.</del>
學士學位 你 <b>母親</b> 的最高學歷是?	碩士學位	<u>L</u>	博士學位	不知道 
中學畢業或以下	大專(	非學士,例如	高級文憑、副學士)	
學士學位	碩士學位	Ĭ.	博士學位	不知道
				i
請問你有興趣參與於十一	或十二月進行的一	個 10 分鐘的跟	進訪問嗎?	
有,請在下方填寫	你的聯絡資料。		沒有	
電話:		Í	電郵:	
在 <u>家中</u> ,你 <u>最主要</u> 說甚麼	語言? <i>(只能選<u>一</u></i>	· <u>項</u> )		
廣東話	普通話	英語	其他,請註明	
在 <u>學校</u> ,你 <u>最主要</u> 說甚麼	(語言? <i>(只能選<mark>一</mark></i>	· <b>項</b> )		
廣東話	普通話	英語	其他,請註明	<del></del>

### 第二部分

在過去幾週,你有否感受到?					
	沒有	一點	中等	很多	非常
…警覺的	1	2	3	4	5
失落的	1	2	3	4	5
受啟發的	1	2	3	4	5
…有敵意的	1	2	3	4	5
有決心的	1	2	3	4	5
…羞愧的	1	2	3	4	5
…專心的	1	2	3	4	5
…緊張的	1	2	3	4	5
有活力的	1	2	3	4	5
…害怕的	1	2	3	4	5

你有多大程度同意以下各項陳述?	你有多大程度同意以下各項陳述?						
	非常				非常		
	不同意	不同意	中立	同意	同意		
學習我學校的文化很重要。	1	2	3	4	5		
在香港使用廣東話很重要。	1	2	3	4	5		
學習中國歷史很重要。	1	2	3	4	5		
在當今世界使用英語很重要。	1	2	3	4	5		
[學校名]的學生這一詞很能夠描述我。	1	2	3	4	5		
在學校使用普通話很重要。	1	2	3	4	5		
學習香港歷史很重要。	1	2	3	4	5		
學習世界文明很重要。	1	2	3	4	5		
在學校使用廣東話很重要。	1	2	3	4	5		
<i>香港人</i> 這一詞很能夠描述我。	1	2	3	4	5		
在香港使用普通話很重要。	1	2	3	4	5		
學習中國文化很重要。	1	2	3	4	5		
在當今世界使用中文很重要。	1	2	3	4	5		
學習我學校的歷史很重要。	1	2	3	4	5		
中國人這一詞很能夠描述我。	1	2	3	4	5		
在香港使用英語很重要。	1	2	3	4	5		
學習世界歷史很重要。	1	2	3	4	5		
在學校使用英語很重要。	1	2	3	4	5		
學習香港文化很重要。	1	2	3	4	5		

在當今世界使用多種語言很重要。	1	2	3	4	5	
全球公民這一詞很能夠描述我。	1	2	3	4	5	

以下情況有多常發生?					
	從不	甚少	偶爾	經常	總是
在別人告訴我之前我已經能理解他們的感受。	1	2	3	4	5
當我的朋友感到害怕時,我也感到害怕。	1	2	3	4	5
我會為受到不公平對待的人感到難過。	1	2	3	4	5
即使我的朋友嘗試隱藏他的怒氣,我仍然能知道。	1	2	3	4	5
當我的朋友感到傷心時,我也感到傷心。	1	2	3	4	5
我會為生病的人感到掛慮。	1	2	3	4	5
當別人裝作快樂但又不是真的快樂時,我能辨別。	1	2	3	4	5
當我的朋友感到憤怒時,我也感到憤怒。	1	2	3	4	5
我會為受傷害的動物感到掛慮。	1	2	3	4	5
我知道別人的感受。	1	2	3	4	5
當身邊的人感到緊張時,我也變得緊張。	1	2	3	4	5
我會為傷心的朋友感到難過。	1	2	3	4	5

以下各項陳述有多能夠形容你?					
我認為我是					
	非常不同 意	不同意	中立	同意	非常同意
外向的。	1	2	3	4	5
友好的。	1	2	3	4	5
自律的。	1	2	3	4	5
…沉著冷靜的。	1	2	3	4	5
喜歡新鮮事物的。	1	2	3	4	5
…安靜的。	1	2	3	4	5
愛挑剔的。	1	2	3	4	5
沒有條理的。	1	2	3	4	5
容易焦慮、生氣的。	1	2	3	4	5
傳統的。	1	2	3	4	5

你有多大程度同意以下各項陳述?					
	非常 不同意	不同意	中立	同意	非常同意
我很高興自己身處在這間學校。	1	2	3	4	5

我覺得自己是香港的一份子。	1	2	3	4	5
我覺得自己跟中國人很親近。	1	2	3	4	5
我很高興自己身處在這個世界上。	1	2	3	4	5
我覺得自己跟這間學校的人很親近。	1	2	3	4	5
我很高興自己身處在香港。	1	2	3	4	5
我覺得自己是中國的一份子。	1	2	3	4	5
我覺得自己跟世界上的人很親近。	1	2	3	4	5
我覺得自己是這間學校的一份子。	1	2	3	4	5
我覺得自己跟香港人很親近。	1	2	3	4	5
我很高興自己身處在中國。	1	2	3	4	5
我覺得自己是這個世界的一份子。	1	2	3	4	5

你有多大程度同意以下各項陳述?						
	非常 不同意	不同意	中立	同意	非常 同意	
我很努力以確保自己有好的學業成績。	1	2	3	4	5	
我會把功課留到最後一刻才做。	1	2	3	4	5	
我對時事感興趣。	1	2	3	4	5	
當我的學業進步時,我更加努力。	1	2	3	4	5	
我會因其他更有趣的事情分心而不做功課。	1	2	3	4	5	
我對討論時事感興趣。	1	2	3	4	5	
我總是努力在學業上做得更好。	1	2	3	4	5	
我經常會把功課忘記,直到快要交回的時候才想起。	1	2	3	4	5	
我對理性分析時事感興趣。	1	2	3	4	5	

一般來說,你有多大程度同意以下各項陳述?								
	非常不同意	不同意	中立	同意	非常同意			
我的學校是個安全的地方。	1	2	3	4	5			
我在香港得到尊重。	1	2	3	4	5			
中國充滿多樣性。	1	2	3	4	5			
我在這個世界得到尊重。	1	2	3	4	5			
我的學校充滿多樣性。	1	2	3	4	5			
香港是個安全的地方。	1	2	3	4	5			
我在中國得到尊重。	1	2	3	4	5			
這個世界是個安全的地方。	1	2	3	4	5			

我在我的學校得到尊重。	1	2	3	4	5
香港充滿多樣性。	1	2	3	4	5
中國是個安全的地方。	1	2	3	4	5
世界充滿多樣性。	1	2	3	4	5

### 第三部分

請跟據你參與的頻率回答這些問題。
你有多常...?

	從不	少於 每年一次	每年 一至兩次	每年 三至五次	每年 五次以上
在 <b>香港</b> 參與 <b>校際學術</b> 活動(例如辯論比賽、 校際朗誦節、模擬法庭)?	1	2	3	4	5
到 <b>其他國家</b> 旅遊?	1	2	3	4	5
在 <b>香港</b> 參與 <b>校際非學術</b> 活動(例如學界體育 比賽、校際音樂節、聯校舞會)?	1	2	3	4	5
到 <b>中國內地</b> 旅遊?	1	2	3	4	5
參與 <b>國際性</b> 的學 <b>術</b> 活動(例如交流、比 賽)?	1	2	3	4	5
…在 <b>香港</b> 參與義工活動?	1	2	3	4	5
在 <b>中國內地</b> 參與 <b>學術</b> 活動(例如交流、比 賽)?	1	2	3	4	5

以下各項陳述有多適用於你?						
	沒有	一點	中等	很多	非常	
我的同學在意我的感受。	1	2	3	4	5	
我的老師喜歡我。	1	2	3	4	5	
我的父母在我們意見不同的時候嘗試妥協。	1	2	3	4	5	
當我遇到困難時,香港人會幫助我。	1	2	3	4	5	
我有親近的家人住在中國內地。	1	2	3	4	5	
我有很好的朋友住在其他國家。	1	2	3	4	5	
我的同學喜歡我。	1	2	3	4	5	
我的老師在乎我。	1	2	3	4	5	
我的父母給予我很多關注。	1	2	3	4	5	
我和香港人的關係很好。	1	2	3	4	5	
我有很好的朋友住在中國內地。	1	2	3	4	5	
我有親近的家人住在其他國家。	1	2	3	4	5	

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!	!	!	!	!	!	
! AND A YOUR !!						- 5
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你有多常從以下媒體中取得新聞資訊?	有多常從以下媒體中取得新聞資訊?					
	從不	甚少	偶爾	經常	總是	
Now 新聞 / Viu TV 新聞	1	2	3	4	5	
商業電台新聞	1	2	3	4	5	
TVB 新聞	1	2	3	4	5	
微博	1	2	3	4	5	
Facebook	1	2	3	4	5	
香港電台新聞	1	2	3	4	5	
雅虎新聞	1	2	3	4	5	
BBC 新聞	1	2	3	4	5	
南華早報	1	2	3	4	5	
中國中央電視 (CCTV)	1	2	3	4	5	
Twitter	1	2	3	4	5	
香港有線新聞	1	2	3	4	5	
am730	1	2	3	4	5	

	從不	甚少	偶爾	經常	總是
頭條日報	1	2	3	4	5
有線電視新聞網 (CNN)	1	2	3	4	5
東方日報/東網	1	2	3	4	5
微信	1	2	3	4	5
Instagram	1	2	3	4	5
明報	1	2	3	4	5
香港01	1	2	3	4	5
星島日報	1	2	3	4	5
YouTube	1	2	3	4	5
抖音	1	2	3	4	5
嗶哩嗶哩	1	2	3	4	5
小紅書	1	2	3	4	5
其他, 請註明	1	2	3	4	5

請跟據你近一年內參與的頻率回答這些問題。
你有多常?
從不 <b>甚少 偶爾</b> 經常 總是

…在學校內參與課外活動?	1	2	3	4	5
參與社區活動(例如節日慶祝活動,聚會等)?	1	2	3	4	5
在學校內參與社際競賽(例如體育比賽,學術比賽等)?	1	2	3	4	5
與其他國家的親友聯絡?	1	2	3	4	5
與朋友在你的社區玩耍?	1	2	3	4	5
…在做與職位相關的職務(例如作為班長、學生會、社團委員 會、風紀等的職務)?	1	2	3	4	5

你可能會喜歡以下活動嗎?					
	完全 不喜歡	少許 喜歡	一般 喜歡	很喜歡	極度 喜歡
參與本地的學校旅行。	1	2	3	4	5
幫助學校接待國際(除中國內地、香港、澳門)訪客。	1	2	3	4	5
參與到訪內地的學校旅行。	1	2	3	4	5
幫助學校接待來自本地學校/機構的訪客。	1	2	3	4	5
參與國際(除中國內地、香港、澳門)交流活動。	1	2	3	4	5
幫助學校接待來自內地學校/機構的訪客。	1	2	3	4	5

### 非常感謝閣下的參與!

### **Appendix B Interview Questions**

- 1. When did you feel the strongest sense of belonging to your school?
- 2. What do you think your school can do to enhance students' sense of belonging to the school?
- 3. When did you feel the strongest sense of belonging to the city?
- 4. What do you think can enhance a person's sense of belonging to the city?
- 5. When did you feel the strongest sense of belonging to your country?
- 6. What do you think is needed to increase a person's sense of belonging to the country?
- 7. When did you think you are part of the world, having the responsibility to contribute to global issues?
- 8. What activities do you think can enhance a person's sense of belonging to the world?